# Enodis

# INSTALLATION/OPERATION & TECHNICAL MANUAL

**ELECTRICALLY HEATED MODELS:** 

**TEMPSTAR** 

**TEMPSTAR LT** 

**TEMPSTAR NB** 

**TEMPSTAR SDS** 

STEAM HEATED MODELS:

**TEMPSTAR S** 



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### MANUFACTURERS WARRANTY

### ONE YEAR LIMITED PARTS & LABOR WARRANTY

ALL NEW JACKSON DISHWASHERS ARE WARRANTED TO THE ORIGINAL PURCHASER TO BE FREE FROM DEFECTS IN MATERIAL OR WORKMANSHIP, UNDER NORMAL USE AND OPERATION FOR A PERIOD OF (1) ONE YEAR FROM THE DATE OF PURCHASE, BUT IN NO EVENT TO EXCEED (18) EIGHTEEN MONTHS FROM THE DATE OF SHIPMENT FROM THE FACTORY.

Jackson MSC agrees under this warranty to repair or replace, at its discretion, any original part which fails under normal use due to faulty material or workmanship during the warranty period, providing the equipment has been unaltered, and has been properly installed, maintained and operated in accordance with the applicable factory instruction manual furnished with the machine and the failure is reported to the authorized service agency within the warranty period. This includes the use of factory specified genuine replacement parts, purchased directly from a Jackson authorized parts distributor or service agency. Use of generic replacement parts may create a hazard and void warranty certification.

The labor to repair or replace such failed part will be paid by Jackson MSC, within the continental United States, Hawaii and Canada, during the warranty period provided a Jackson MSC authorized service agency, or those having prior authorization from the factory, performs the service. Any repair work by persons other than a Jackson MSC authorized service agency is the sole responsibility of the customer. Labor coverage is limited to regular hourly rates, overtime premiums and emergency service charges will not be paid by Jackson MSC.

Accessory components not installed by the factory carry a (1) one year parts warranty only. Accessory components such as table limit switches, pressure regulators, pre rinse units, etc. that are shipped with the unit and installed at the site are included. Labor to repair or replace these components is not covered by Jackson MSC.

This warranty is void if failure is a direct result from shipping, handling, fire, water, accident, misuse, acts of god, attempted repair by unauthorized persons, improper installation, if serial number has been removed or altered, or if unit is used for purpose other than it was originally intended.

### TRAVEL LIMITATIONS

Jackson MSC limits warranty travel time to (2) two hours and mileage to (100) one hundred miles. Jackson MSC will not pay for travel time and mileage that exceeds this, or any fees such as those for air or boat travel without prior authorization.

### WARRANTY REGISTRATION CARD

The warranty registration card supplied with the machine must be returned to Jackson MSC within 30 days to validate the warranty.

### REPLACEMENT PARTS WARRANTY

Jackson replacement parts are warranted for a period of 90 days from the date of installation or 180 days from the date of shipment from the factory, which ever occurs first.

### PRODUCT CHANGES AND UPDATES

Jackson MSC reserves the right to make changes in design and specification of any equipment as engineering or necessity requires.

THIS IS THE ENTIRE AND ONLY WARRANTY OF JACKSON MSC. JACKSON'S LIABILITY ON ANY CLAIM OF ANY KIND, INCLUDING NEGLIGENCE, WITH RESPECT TO THE GOODS OR SERVICES COVERED HEREUNDER, SHALL IN NO CASE EXCEED THE PRICE OF THE GOODS OR SERVICES OR PART THEREOF WHICH GIVES RISE TO THE CLAIM.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING FOR FITNESS OR MERCHANTABILITY, THAT ARE NOT SET FORTH HEREIN, OR THAT EXTEND BEYOND THE DURATION HEREOF. UNDER NO CIRCUMSTANCES WILL JACKSON MSC BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, OR FOR THE DAMAGES IN THE NATURE OF PENALTIES, ARISING OUT OF THE USE OR INABILITY TO USE ANY OF ITS PRODUCTS.

### ITEMS NOT COVERED

This warranty does not cover cleaning or deliming of the unit or any component such as, but not limited to, wash arms, rinse arms or strainers at anytime. Nor does it cover adjustments such as, but not limited to timer cams, thermostats or doors, beyond 30 days from the date of installation. In addition, the warranty will only cover the replacement of wear items such as curtains, drain balls, door guides or gaskets during the first 30 days after installation. Also, not covered are conditions caused by the use of incorrect (non-Commercial) grade detergents, incorrect water temperature or pressure, or hard water conditions.



CALL 1-888-800-5672 TO REGISTER THIS PRODUCT! FAILURE TO DO SO WILL VOID THE WARRANTY!

LLAME AL 1-888-800-5672 PARA REGISTRAR ESTE PRODUCTO!
AL NO HACERLO LA GARANTIA SERA ANULADA!

S.V.P. APPELER 1-888-800-5672 POUR ENREGISTRER CE PRODUIT, LA GARANTIE SERA ANNULEE POUR TOUT PRODUIT NON- ENREGISTREE

REVISION	REVISION DATE	MADE BY	APPLICABLE ECN	DETAILS
F	05-14-04	MAW	6964 7006	Changed thermostat. Changed thermostat mounting bracket. Change to new layout. Added note for "wye configuration".
G	01-05-05	MAW	7084 6690 7180	Added Overflow Lift Brackets. Added Right False Panel Weldment used with overflow tube lifter. Added universal False Panel Weldment for Tempstars. Update Tempstar Top Mount 460V Schematic to revision D. Added "GO*BOX" Kit.
н	01-17-06	MAW	7609	Added schematics and parts for Universal Timers to be used in Top Mount Control Boxes Only.
I	02-07-06	MAW	7231	Added thermostat replacement kit 06401-011-66-55. Replaced rinse thermostat 05930-121-71-29 with 05930-510-03-79.
J	06-26-06	MAW	7687, 7540 7738, 7789 7571	Update to current layout. Added phase conversion instructions and service kits. Changed hood supports and added hood block spacers. Added numbers for plumbing assemblies. Updated drain quench assembly drawing. Replaced 05930-121-67-72 with 05930-510-02-79.
К	12-07-07	MAW	Process	Combined I/O & Technical manuals. Updated schematics to include exhaust fan/dispenser connections. Updated control boxes with multicycle switches. Corrected number for reed switch and cantilever support brackets.



### **TEMPSTAR NB**

TEMPSTAR = Electrically heated, high temp, hot water sanitizing, with booster heater, door-type dishmachine

TEMPSTAR LT = Electrically heated, low temp, chemical sanitizing, no rinse booster, door-type dishmachine

TEMPSTAR NB = Electrically heated, high temp, hot water sanitizing, no rinse booster, door-type dishmachine

TEMPSTAR S = Steam heated, high temp, hot water sanitizing, door-type dishmachine

TEMPSTAR SDS = Electrically heated, high temp, with solid chemical dispenser, with booster heater, doortype dishmachine

lodel:
erial No.:
nstallation Date:
ervice Rep. Name:
hone No.:

Jackson MSC LLC. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.

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## **OPERATING CAPACITIES**

PERFORMANCE/CAPABILITIES WATER REQUIREMENTS							
OPERATING CAPACITY:		TEMPSTAR/TEMPSTAR SDS:					
RACKS PER HOUR DISHES PER HOUR GLASSES PER HOUR	57 1425 1425	WASH TEMPERATURE (MINIMUM)(°F) WASH TEMPERATURE (MINIMUM)(°C) RINSE TEMPERATURE (MINIMUM)(°F) RINSE TEMPERATURE (MINIMUM)(°C)	150 66 180 83				
OPERATING CYCLE (SECONDS):		INLET WATER TEMPERATURE:  12KW RINSE HEATER (°F)	140				
MINIMUM (OTHER CYCLE TIMES ARE AVAILABLE WASH TIME RINSE TIME DWELL TIME TOTAL CYCLE TIME	<b>E)</b> 45 11 2 60	12KW RINSE HEATER (°C) 12KW RINSE HEATER (°C) 14KW RINSE HEATER (°F) 14KW RINSE HEATER (°C) FLOW PRESSURE (PSI) WATER LINE SIZE (NPT) DRAIN LINE SIZE (NPT)	60 110 44 20±5 3/4" 1 1/2"				
TANK CAPACITY:		TEMPSTAR LT:					
WASH TANK (GAL) WASH TANK (L) RINSE TANK (TEMPSTAR/TEMPSTAR SDS) (GAL) RINSE TANK (TEMPSTAR/TEMPSTAR SDS) (L)	8.0 30.3 3.0 11.4	WASH TEMPERATURE (MINIMUM)(°F) WASH TEMPERATURE (MINIMUM)(°C) RINSE TEMPERATURE (MINIMUM)(°F) RINSE TEMPERATURE (MINIMUM)(°C) INLET WATER TEMPERATURE (°F)	130 55 130 55 130				
STEAM REQUIREMENTS:		INLET WATER TEMPERATURE (°C) FLOW PRESSURE (PSI)	55 20±5				
COIL SIZE STEAM FLOW PRESSURE (P.S.I.) CONSUMPTION @ 15 P.S.I. (LBS/HR)	3/4" 10-20 45	WATER LINE SIZE (NPT) DRAIN LINE SIZE (NPT) MINIMUM CHLORINE REQUIRED (PPM)	3/4" 1 1/2" 50				
ELECTRICAL REQUIREMENTS		TEMPSTAR NB/TEMPSTAR S:					
WASH MOTOR HP	3/4	WASH TEMPERATURE (MINIMUM)(°F) WASH TEMPERATURE (MINIMUM)(°C) RINSE TEMPERATURE (MINIMUM)(°F)	150 66 180				
NOTE: Always refer to the machine data plate for electrical and water requirements. The material pon this page is for reference only and may be su change without notice.	provided	RINSE TEMPERATURE (MINIMUM)(°C) INLET WATER TEMPERATURE (°F) INLET WATER TEMPERATURE (°C) FLOW PRESSURE (PSI) WATER LINE SIZE (NPT) DRAIN LINE SIZE (NPT)	83 180 83 20±5 3/4" 1 1/2"				

### **ELECTRICAL REQUIREMENTS**

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

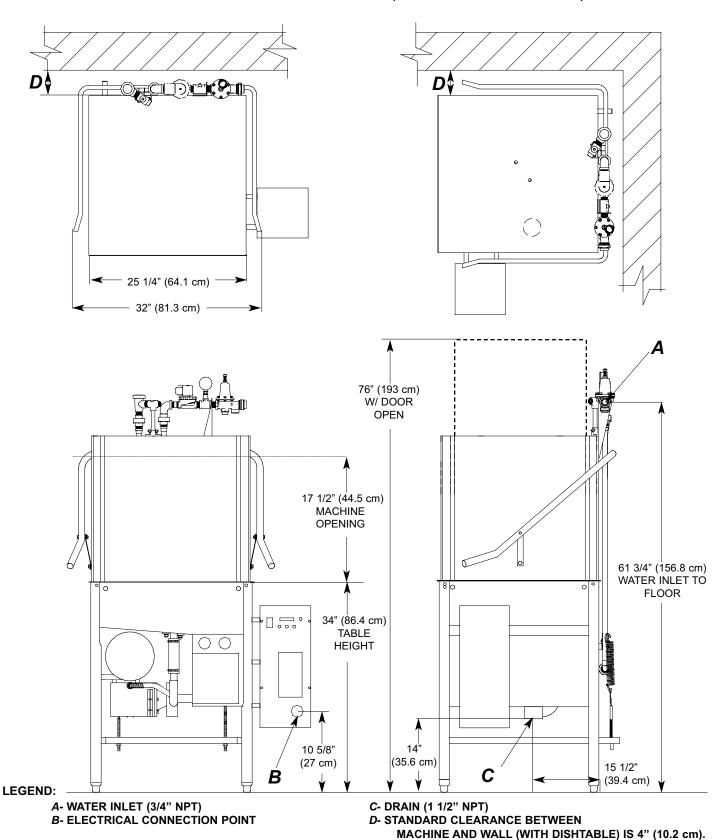
### **TEMPSTAR/TEMPSTAR SDS:**

### **TEMPSTAR LT/TEMPSTAR NB:**

<b>VOLTS</b> 208 208	1 1	<b>HZ</b> 50 50	RINSE HEATER RATINGS 12KW@240V 14KW@240V	AMPS 71 A 78 A	TYPICAL ELECTRICAL CIRCUIT 90 AMP 100 AMP	<b>VOLTS</b> 208 230	<u>РН</u> 1	<b>HZ</b> 50 50	RINSE HEATER <u>RATINGS</u> N/A N/A	TOTAL <u>AMPS</u> 28 A 30 A	TYPICAL ELECTRICAL CIRCUIT 35 AMP 40 AMP
230	1	50	12KW@240V	78 A	100 AMP						
230	1	50	14KW@240V	86 A	110 AMP	208	3	50	N/A	20 A	25 AMP
						230	3	50	N/A	21 A	30 AMP
208	3	50	12KW@240V	45 A	60 AMP	380	3	50	N/A	10 A	15 AMP
208	3	50	14KW@240V	49 A	70 AMP	415	3	50	N/A	10 A	15 AMP
230	3	50	12KW@240V	48 A	60 AMP	440	3	50	N/A	8 A	15 AMP
230	3	50	14KW@240V	53 A	70 AMP						
380	3	50	12KW@380V	29 A	40 AMP	208	1	60	N/A	26 A	35 AMP
380*	3	50	14KW@208V	34 A	45 AMP	230	1	60	N/A	28 A	35 AMP
415	3	50	12KW@415V	26 A	35 AMP						
415	3	50	14KW@415V	29 A	40 AMP	208	3	60	N/A	18 A	25 AMP
440	3	50	12KW@460V	21 A	30 AMP	230	3	60	N/A	28 A	35 AMP
440	3	50	14KW@460V	25 A	35 AMP	460	3	60	N/A	8 A	15 AMP
208	1	60	12KW@240V	69 A	90 AMP						
208	1	60	14KW@240V	76 A	100 AMP	<b>TEMPS</b>	TAR S:				
230	1	60	12KW@240V	76 A	100AMP				RINSE		<b>TYPICAL</b>
230	1	60	14KW@240V	84 A	110 AMP				HEATER	TOTAL I	ELECTRICAL
						<b>VOLTS</b>	<u>PH</u>	<u>HZ</u>	<b>RATINGS</b>	<b>AMPS</b>	<b>CIRCUIT</b>
208	3	60	12KW@240V	43 A	60 AMP	208	1	60	N/A	6 A	15 AMP
208	3	60	14KW@240V	47 A	60 AMP	230	1	60	N/A	6 A	15 AMP
230	3	60	12KW@240V	46 A	60 AMP						
230	3	60	14KW@240V	51 A	70 AMP	208	3	60	N/A	6 A	15 AMP
460	3	60	12KW@480V	22 A	30 AMP	230	3	60	N/A	6 A	15 AMP
460	3	60	14KW@480V	25 A	35 AMP						

<sup>\*</sup> This model is wired in a wye configuration for the heaters.

### DIMENSIONS TEMPSTAR/TEMPSTAR LT/NB (SIDE MOUNTED CONTROL BOX)



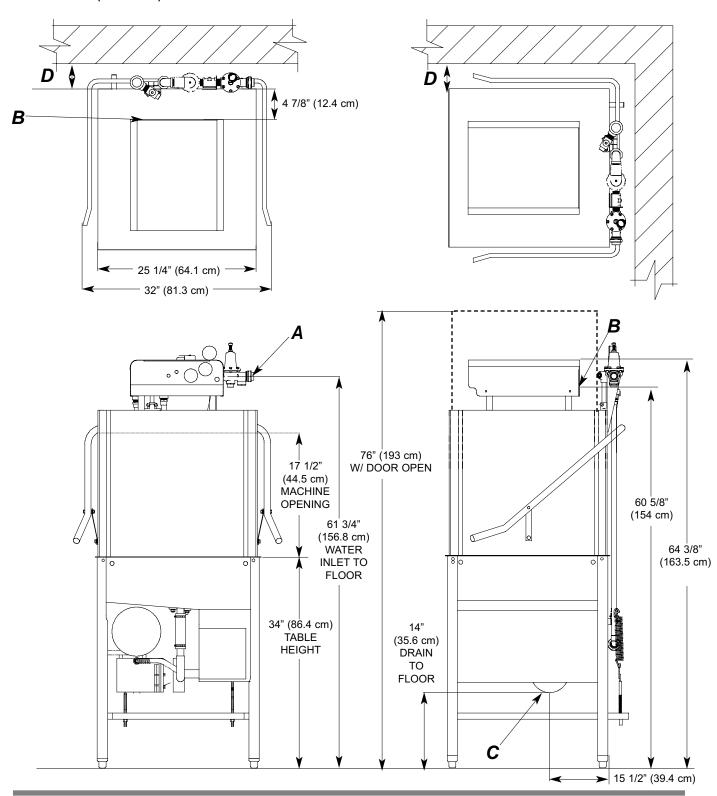
Tempstar LT/NB/S/SDS Technical Manual 7610-011-86-35 Issued: 12-07-2007 Revised: N/A

### DIMENSIONS TEMPSTAR/NB/LT/S (TOP MOUNTED CONTROL BOX)

- A- WATER INLET (3/4" NPT)
  B- ELECTRICAL CONNECTION POINT
- C- DRAIN (1 1/2" NPT)

### **LEGEND**

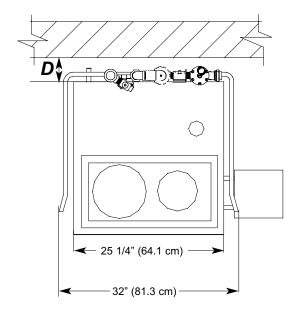
**D- STANDARD CLEARANCE BETWEEN** MACHINE AND WALL (WITH DISHTABLE) IS 4" (10.2 cm).

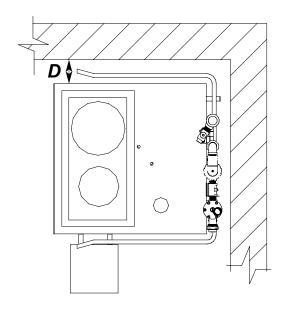


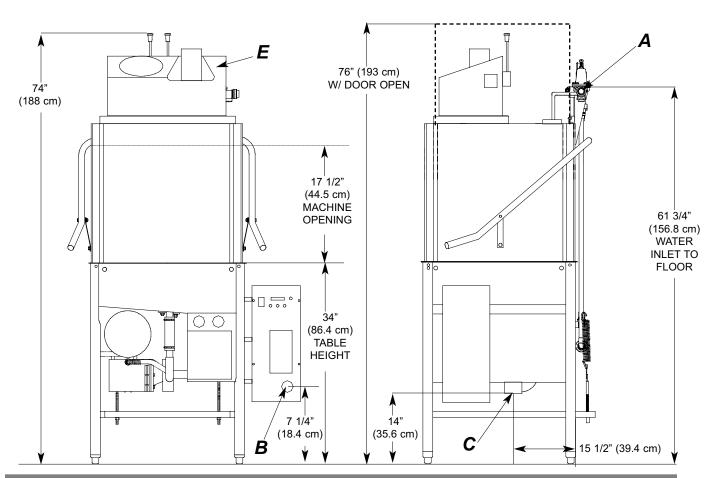
### **DIMENSIONS TEMPSTAR SDS**

- A- WATER INLET (3/4" NPT)
- **B- ELECTRICAL CONNECTION POINT**
- C- DRAIN (1 1/2" NPT)

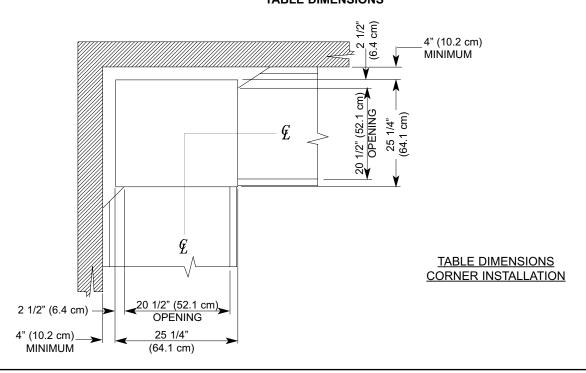
D- STANDARD CLEARANCE BETWEEN
MACHINE AND WALL (WITH DISHTABLE) IS 4" (10.2 cm).
E- CHEMICAL DISPENSING SYSTEM

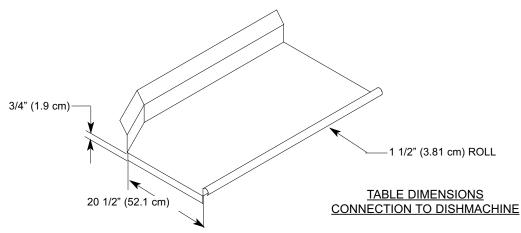


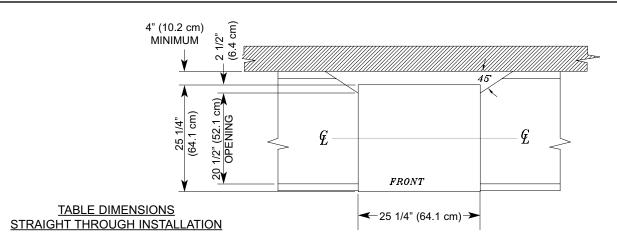




# SECTION 1: SPECIFICATION INFORMATION TABLE DIMENSIONS







### INSTALLATION INSTRUCTIONS

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in there being damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

**UNPACKING THE DISHMACHINE:** Once the machine has been removed from the container, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately to have the missing item shipped to you.

**LEVEL THE DISHMACHINE:** The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections.

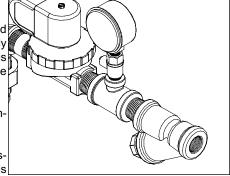
**PLUMBING THE DISHMACHINE:** All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line, and any expenses resulting from this fouling, are not the responsibility of the manufacturer.

**CONNECTING THE DRAIN LINE:** The drain for the Tempstar models covered in this manual are gravity discharge drains. All piping from the 1 1/2" FNPT connection on the wash tank must be pitched (1/4" per foot) to the floor or sink drain. All piping from the machine to the drain must be a minimum 1 1/2" I.P.S. and shall not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 5 gallons per minute.

**WATER SUPPLY CONNECTION:** Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. Install the water supply line (3/4" pipe size minimum) to the dishmachine line strainer using copper pipe. It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service.

The water supply line is to be capable of 20  $\pm 5$  PSI "flow" pressure at the recommended temperature indicated on the data plate.

In areas where the water pressure fluctuates or is greater than the recommended pressure, it is suggested that a water pressure regulator be installed. The Tempstar models covered in this manual come with water pressure regulators as standard equipment. Please notify Jackson immediately if this component is not present on your machine.



Raise

Frame with Adjustable Foot

Incoming Plumbing Y-strainer Connection

Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

It is also recommended that a shock absorber (not supplied with the Tempstar model) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve as it operates, from causing damage to the equipment.

**STEAM LINE CONNECTION:** The steam machines come with lines by which the source steam needs to be connected. Connect all steam lines to the machine as all applicable codes provide. See machine data plate for information concerning steam flow pressure.

**CHEMICAL DISPENSING EQUIPMENT:** The Tempstar LT machine requires that a separate chemical feeder be connected to it to provide the required detergent and sanitizer. This feeder needs to be able to operate against a head of 25 PSI and provide 1.79 ml of a 10% Chlorine sanitizer per minute.

### **INSTALLATION INSTRUCTIONS (CONTINUED)**

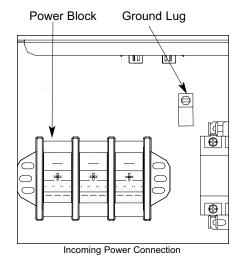
**PLUMBING CHECK:** Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

**ELECTRICAL POWER CONNECTION:** Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

The dishmachine data plate is located on the right side and to the front of the machine. Refer to the data plate for machine operating requirements, machine voltage, total amperage load and serial number.

To install the incoming power lines, open the control box. This will require taking a phillipshead screwdriver and removing the four (4) screws on the front cover of the control box. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1, L2, and L3 (3 phase only)) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. Tighten the connections. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.



**VOLTAGE CHECK:** Ensure that the power switch is in the OFF position and apply power to the dishmachine. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.

### **OPERATION INSTRUCTIONS**

**PREPARATION:** Before proceeding with the start-up of the unit, verify the following:

- 1. The pan strainer and pump suction strainer are in place and are clean.
- 2. The overflow tube and o-ring are installed.
- 3. That the wash and rinse arms are screwed securely into place and that their endcaps are tight. The wash and rinse arms should rotate freely.

**POWER UP:** To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

**FILLING THE WASH TUB:** Ensure that the delime switch is in the NORMAL position, and place the power switch into the ON position. The Tempstar should fill automatically and shut off when the appropriate level is reached (just below the pan strainer). Verify that the drain stopper is preventing the wash tub water from leaking excessively. There may be some slight leakage from the drain hole. Verify that there are no other leaks on the unit before proceeding any further. The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

**WARE PREPARATION:** Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscraped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes. Place cups and glasses upside down in racks so that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

**DAILY MACHINE PREPARATION:** Refer to the section entitled "PREPARATION" at the top of this page and follow the instructions there. Afterwards, check that all of the chemical levels are correct and/or that there is plenty of detergent available for the expected workload.

**WARM-UP CYCLES:** For a typical daily start-up, it may be necessary to run the machine through 3 cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level. Lift the doors and the cycle light will illuminate. When the light goes out, close the doors, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

**WASHING A RACK OF WARE:** To wash a rack, open the doors completely (being careful for hot water that may drip from the doors) and slide the rack into the unit.

Close the doors and the unit will start automatically. Once the cycle is completed, open the door (again watching for the dripping hot water) and remove the rack of clean ware. Replace with a rack of soiled ware and close the doors. The process will then repeat itself.

**OPERATIONAL INSPECTION:** Based upon usage, the pan strainer may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainer to ensure it has not become clogged. If the strainer does, it will reduce the washing capability of the machine. Instruct operators to clean out the pan strainer at regular intervals or as required by work load.

**SHUTDOWN AND CLEANING:** At the end of the workday, close the doors. When the unit completes the cycle, turn the power switch to the OFF position and open the doors. Remove and clean the pan strainer. Remove the drain stopper from the tub and allow the tub to drain (NOTE: the wash tank water will be hot so caution is advised). Once the wash tub is drained, remove the pump suction strainer. Remove soil and debris from the strainer and set to the side. Unscrew the wash and rinse arms from their manifolds. Remove the endcaps and flush the arms with water. Use a brush to clean out the inside of the arms. If the nozzles appear to be clogged, use a toothpick to remove the obstruction. Wipe the inside of the unit out, removing all soil and scraps. Reassembly the wash and rinse arms and replace them in the unit. The arms only need to be hand tight, do not use tools to tighten them down. Reinstall the drain stopper and strainers and close the doors.

### DETERGENT CONTROL

Detergent usage and water hardness are two factors that contribute greatly to how efficiently your dishmachine will operate. Using detergent in the proper amount can become, in time, a source of substantial savings. A qualified water treatment specialist can tell you what is needed for maximum efficiency from your detergent, but you should still know some basics so you'll understand what they are talking about.

First, you must understand that hard water greatly effects the performance of the dishmachine. Water hardness is the amount of dissolved calcium and magnesium in the water supply. The more dissolved solids in the water, the greater the water hardness. Hard water works against detergent, thereby causing the amount of detergent required for washing to increase. As you use more detergent, your costs for operating the dishmachine will increase and the results will decrease. The solids in hard water also may build-up as a scale on wash and rinse heaters, decreasing their ability to heat water. Water temperature is important in removing soil and sanitizing dishes. If the water cannot get hot enough, your results may not be satisfactory. This is why Jackson recommends that if you have installed the machine in an area with hard water, that you also install some type of water treatment equipment to help remove the dissolved solids from the water before it gets to the dishmachine.

Second, hard water may have you adding drying agents to your operating cycle to prevent spotting, when the real problem is deposited solids on your ware. As the water evaporates off of the ware, the solids will be left behind to form the spotting and no amount of drying agent will prevent this. Again, using treated water will undoubtedly reduce the occurrences of this problem.

Third, treated water may not be suitable for use in other areas of your operation. For instance, coffee made with soft water may have an acid or bitter flavor. It may only be feasible to install a small treatment unit for the water going into the dishmachine itself. Discuss this option with your qualified water treatment specialist.

Even after the water hardness problems have been solved, there still must be proper training of dishmachine operators in how much detergent is to be used per cycle. Talk with your water treatment specialist and detergent vendor and come up with a complete training program for operators. Using too much detergent has as detrimental effects as using too little. The proper amount of detergent must be used for job. It is important to remember that certain menu items may require extra detergent by their nature and personnel need to be made aware of this. Experience in using the dishmachine under a variety of conditions, along with good training in the operation of the machine, can go a long way in ensuring your dishmachine operates as efficiently as possible.

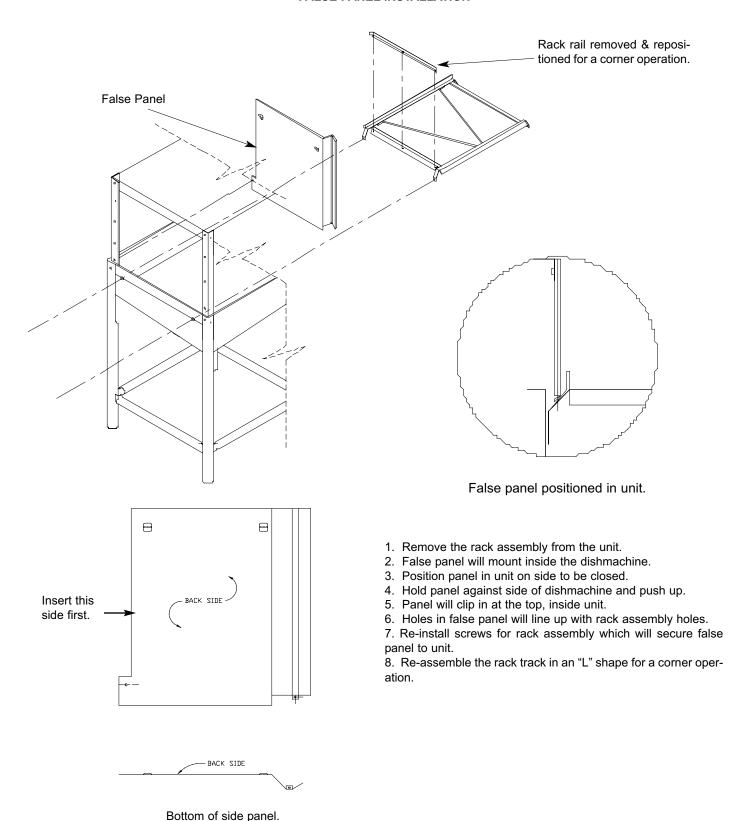
Certain dishmachine models require that chemicals be provided for proper operation and sanitization. Some models even require the installation of third-party chemical feeders to introduce those chemicals to the machine. Jackson does not recommend or endorse any brand name of chemicals or chemical dispensing equipment. Contact your local chemical distributor for questions concerning these subjects.

Some dishmachines come equipped with integral solid detergent dispensers. These dispensers are designed to accommodate detergents in a certain sized container. If you have such a unit, remember to explain this to your chemical distributor upon first contacting them.

As explained before, water temperature is an important factor in ensuring that your dishmachine functions properly. The data plate located on each unit details what the minimum temperatures must be for either the incoming water supply, the wash tank and the rinse tank, depending on what model of dishmachine you have installed. These temperatures may also be followed by temperatures that Jackson recommends to ensure the highest performance from you dishmachine. However, if the minimum requirements are not met, the chances are your dishes will not be clean or sanitized. Remember, a dish can look clean, but it may not be sanitized. Instruct your dishmachine operators to observe the required temperatures and to report when they fall below the minimum allowed. A loss of temperature can indicate a much larger problem such as a failed heater or it could also indicate that the hot water heater for your operation is not up to capacity and a larger one may need to be installed.

There are several factors to consider when installing your dishmachine to ensure that you get the best possible results from it and that it operates at peak efficiency for many years. Discuss your concerns with your local chemical distributor and water treatment specialist before there is a problem.

### **FALSE PANEL INSTALLATION**



# SECTION 3: PREVENTATIVE MAINTENANCE

### **SECTION 3: PREVENTATIVE MAINTENANCE**

### PREVENTATIVE MAINTENANCE

The dishmachines covered in this manual are designed to operate with a minimum of interaction with the operator. However, this does not mean that some items will not wear out in time. Jackson highly recommends that any maintenance and repairs not specifically discussed in this manual should be performed by QUALIFIED SERVICE PERSONNEL ONLY. Performing maintenance on your dishmachine may void your warranty if it is still in effect, so if you have a question or concern, do not hesitate to contact one of the QUALIFIED SERVICE AGENCIES listed in the back of this manual.

There are many things that operators can do to prevent catastrophic damage to the dishmachine. One of the major causes of component failure has to do with prescrapping procedures. A dishmachine is not a garbage disposal; any large pieces of material that are put into the machine shall remain in the machine until they are either broken up (after spreading out on your ware!) or physically removed. Strainers are installed to help catch debris, but they do no good if they are clogged. Have operators regularly inspect the pan strainers to ensure (1) that they are free of soil and debris and (2) they are laying flat in the tub.

When cleaning out strainers, do NOT beat them on waste cans. The strainers are made of metal and can be forgiving; but once severe damage is done, it is next to impossible for the strainer to work in the way it was designed to. Wipe out strainers with a rag and rinse under a faucet if necessary. For stubborn debris, a toothpick should be able to dislodge any obstructions from the perforations. Always ensure that strainers are placed back in the machine before operation and that they lay flat in the tub.

You may wish to learn more about how your water hardness will effect the performance of your machine. Hard water makes dishmachines work harder and decreases efficiency.

Again, it is important to remind operators that trying to perform corrective maintenance on the dishmachine could lead to larger problems or even cause harm to the operator. If a problem is discovered; secure the dishmachine using proper shut down procedures as listed in this manual and contact a QUALIFIED SERVICE AGENCY.

Some problems, however, may having nothing to do with the machine itself and no amount of preventative maintenance is going to help. A common problem has to do with temperatures being too low. Verify that the water temperatures coming to your dishmachine match the requirements listed on the machine data plate. There can be a variety of reasons why your water temperature could be too low and you should discuss it with a QUALIFIED SERVICE AGENCY to determine what can be done.

By following the operating and cleaning instructions in this manual, you should get the most efficient results from your machine. As a reminder, here are some steps to take to ensure that you are using the dishmachine the way it was designed to work:

- 1. Ensure that the water temperatures match those listed on the machine data plate.
- 2. Ensure that all strainers are in place before operating the machine.
- 3. Ensure that all wash and/or rinse arms are secure in the machine before operating.
- 4. Ensure that drains are closed/sealed before operating.
- 5. Remove as much soil from dishes by hand as possible before loading into racks.
- 6. Do not overfill racks.
- 7. Ensure that glasses are placed upside down in the rack.
- 8. Ensure that all chemicals being injected to machine have been verified as being at the correct concentrations.
- 9. Clean out the machine at the end of every workday as per the instructions in the manual.
- 10. Always contact a QUALIFIED SERVICE AGENCY whenever a serious problem arises.
- 11. Follow all safety procedures, whether listed in this manual or put forth by local, state or national codes/regulations.

# SECTION 4: TROUBLESHOOTING SECTION

### SECTION 4: TROUBLESHOOTING

### **COMMON PROBLEMS**



WARNING: Inspection, testing and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. USE EXTREME CAUTION WHEN TESTING THE MACHINE.

### Problem: Dishmachine will not fill after the door is close. Power "ON" light is illuminated.

- 1. Faulty rinse solenoid valve. Repair or replace valve as required.
- 2. Faulty door switch. Verify the wiring of the switch; if correct, replace the switch.
- 3. Fouled/faulty high level probe. Clean probe if fouled. If clean, and still not working, replace.

### Problem: Dishmachine will not fill after the door is closed. Power "ON" light is not illuminated.

- 1. Service breaker tripped. Reset. If the breaker trips again, contact an electrician to verify the amp draw of the machine.
- 2. Machine not connected to power source. Verify that the machine has been properly connected to the power source.
- 3. Faulty power source. Verify the wiring of the switch; if correct, replace switch.

### Problem: Dishmachine will not run after the door is closed. Power "ON" light is illuminated and the unit is filling.

- 1. Timer motor is faulty. Verify that the timer is rotating. If not, check to see that the motor is receiving power. If so, replace the motor and/or timer assembly.
- 2. Wash motor faulty/damaged. Verify that the wash motor is getting power. If so, replace the motor.
- 3. Wash motor contactor faulty. Check for continuity; if contacts are open, replace the contactor.

### Problem: Dishmachine runs continuously in the wash cycle.

- 1. Machine is in Delime mode. Flip NORMAL/DELIME switch to NORMAL mode.
- 2. Timer motor is faulty. Verify that the timer is rotating. If not, check to see that the motor is receiving power. If so, replace the motor and/or timer assembly.
- 3. Cam timer jammed by obstruction. Remove obstruction.

### Problem: Wash or rinse heater does not work.

- 1. Faulty heater element. Check element for continuity; if open, replace the heater.
- 2. Faulty heater contactor. Replace the contactor.
- 3. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.

### Problem: Dishmachine fill slowly and/or the rinse is weak.

- 1. Clogged or obstructed rinse arms. Remove and clean the rinse arms.
- 2. Low incoming water pressure. Adjust the water pressure regulator to ensure that there is  $20 \pm 5$  PSI flow.
- 3. Y-strainer is clogged. Clean out the Y-strainer.

### Problem: Rinse water not reaching required temperature.

- 1. Faulty rinse heater. Check element for continuity; if open, replace heater.
- 2. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.
- 3. Rinse thermometer is defective. Replace thermometer.

### Problem: Wash water is not reaching required temperature.

- 1. Faulty wash heater. Check element for continuity; if open, relace the heater.
- 2. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.
- 3. Wash thermometer is defective. Replace thermometer.

### **SECTION 4: TROUBLESHOOTING**

#### **COMMON PROBLEMS**



WARNING: Inspection, testing and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. USE EXTREME CAUTION WHEN TESTING THE MACHINE.

### Problem: Doors will not close completely.

- 1. Improper spring tension. Adjust spring tension as required by loosening (not removing) spring bolt nuts and adjusting the tension. Tighten nuts back when done.
- 2. Obstruction in door channel. Remove the obstruction.
- 3. Doors are not square with frame. Adjust the frame to accommodate the doors.

### Problem: Water leaks at the wash pump.

- 1. Wash pump seal defective. Replace the seal.
- 2. Petcock or pump drain (if equipped) not shut/tight. Close or tighten.
- 3. Loose hoses (hose clamps) on the wash pump. Tighten the hose clamps.

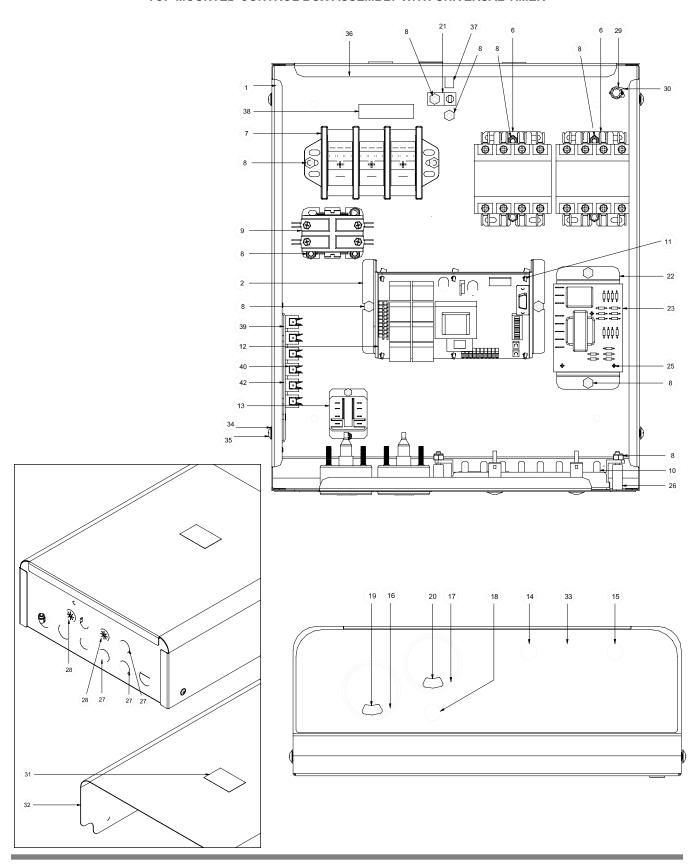
### Problem: Will not rinse during autocycle.

- 1. Defective rinse solenoid. Repair or replace the rinse solenoid as required.
- 2. Faulty fill microswitch. Replace microswitch.
- 3. No water to the machine. Verify that there is water a 20  $\pm 5$  PSI connected to the machine.

### Problem: Dishes are not coming clean.

- 1. Machine temperatures are not up to the minimum requirements. Verify that incoming water, rinse water, and wash water match the required temperatures as listed on the machine data plate.
- 2. No detergent/too much detergent. Adjust detergent concentration as required for the amount of water held by the machine.
- 3. Solid dispenser canister is empty. Replace the canister.

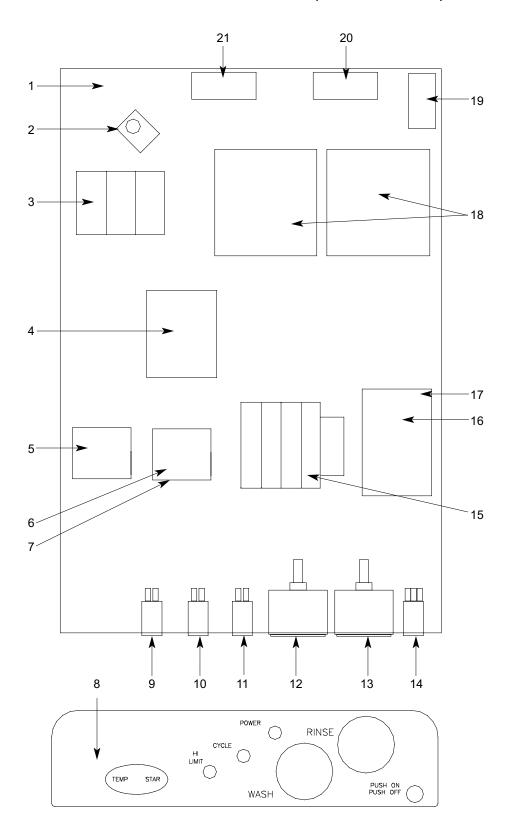
### TOP MOUNTED CONTROL BOX ASSEMBLY WITH UNIVERSAL TIMER



# TOP MOUNTED CONTROL BOX ASSEMBLY WITH UNIVERSAL TIMER (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	05700-003-30-14
2	1	Timer Bracket	05700-003-02-08
5	2	Locknut, 6-32 S/S Hex w/Nylon Insert	05310-373-03-00
6	2	Contactor, 4 Pole	05945-109-01-69
7	1	Terminal Block	05940-011-48-27
8	19	Locknut, 10-24 S/S Hex w/Nylon Insert	05310-373-01-00
9	1	Contactor, Wash Motor 208-230, 30Amp	05945-002-74-20
10	1	Switch, 8 Button	05930-001-99-51
11	6	Holder, Keystone	05940-002-21-87
12	1	Timer, Universal	05945-003-07-48
13	1	Relay, All Voltages	05945-111-47-51
	1	Relay, (415V, 3PH, 5 Wire Only)	05945-111-89-75
14	1	Light, Green	05945-111-44-43
15	1	Light, Red	05945-111-44-45
16	1	Temperature Gauge, Wash 96" Lead	06685-111-68-48
17	1	Temperature Gauge, Rinse 48" Lead	06685-111-68-49
18	1	Light, Yellow	05945-111-44-44
19	1	Decal Wash 150F. Deg. Min.	09905-002-97-61
20	1	Decal Wash 180F. Deg. Min.	09905-002-97-62
21	1	Ground Lug	05940-200-76-00
22	1	Bracket, Liquid Level Control Board	05700-002-13-22
23	1	Liquid Level Control Board	06680-200-08-21
24	6	Tricnut, 6-32	N/A
25	3	Screw, 6-32 x 5/8"	05305-011-39-85
26	1	Spacer, Switch Panel Temp	05700-002-50-02
27	3	Plug, 1/2"	05975-011-47-81
28	2	Grommet, 7/8" Split	05975-200-40-00
29	1	Bushing, Snap	05975-210-05-00
30	1	Clamp, Hose, .25312	05975-002-61-43
31	1	Decal, Warning-Disconnect Power	09905-100-75-93
32		Cover, Top Mount Control Box	05700-002-23-03
33	1	Decal, Control Box	09905-003-21-90
34	4	Lockwasher, Int. Tooth #10	05311-273-03-00
35	4	Screw, 10-32 x 3/8" Phillips Truss Head	05305-173-12-00
36	1	Decal, Copper Conductors	09905-011-47-35
37	1	Decal, Ground	09905-011-86-86
38	1	Decal, L1, L2	09905-002-78-67
39	1	Bracket, Fuse Strip	05700-002-42-03
40	1	Fuse Holder, 6 Pole	05920-002-42-13
41	2	Screw, 6-32 x 3/8" W/ Ext. Tooth Washer	05305-002-25-91
42	1	Decal, Dispenser Connection	09905-003-34-09

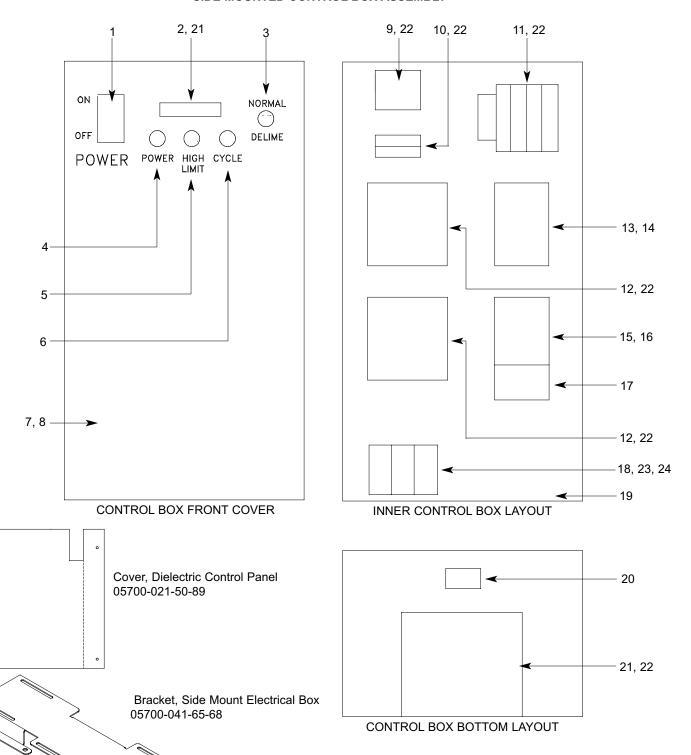
## TOP MOUNTED CONTROL BOX ASSEMBLY (MECHANICAL TIMER)



# TOP MOUNTED CONTROL BOX ASSEMBLY (MECHANICAL TIMER) (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	05700-002-29-76
2	1	Ground Lug	05940-200-76-00
3	1	Terminal Block	05940-011-48-27
3	1	Terminal Block (415V, 3PH, 5 Wire Only)	05940-002-42-24
4	1	Contactor, Wash Motor 208-230	05945-002-74-20
4	1	Contactor, Wash Motor (380, 415, 440, 460 Volt Units)	05945-002-65-00
4	1	Overload, 1.7-2.6 (380, 415, 440, 460 Volt Units)	05945-002-65-02
5	1	Relay, All Voltages	05945-111-47-51
5	1	Relay, (415V, 3PH, 5 Wire Only)	05945-111-89-75
6	1	Counter	05990-111-47-42
7	1	Plate, Counter Mounting	05700-002-37-71
8	1	Decal, Control Box	09905-002-31-85
9	1	Light, Yellow	05945-111-44-44
10	1	Light, Green	05945-111-44-43
11	1	Light, Red	05945-111-44-45
12	1	Temperature Gauge, Wash 96" Lead	06685-111-68-48
13	1	Temperature Gauge, Rinse 48" Lead	06685-111-68-49
14	1	Switch, Power	05930-002-29-13
15	1	Timer, 60 Hz All Voltages	05945-303-31-00
15	1	Timer, 50 Hz All Voltages	05945-306-14-00
16	1	Liquid Level Control Board	06680-200-08-21
17	1	Bracket, Liquid Level Control Board	05700-002-13-22
18	2	Heater Contactor (All Voltages) (Not used on Tempstar S)	05945-109-01-69
18	2	Heater Contactor (415V, 3PH, 5 Wire Only)	05945-002-64-96
19	1	Magnetic Reed Switch	05930-011-47-50
20	1	Normal Delime Switch	05930-301-21-18
21	1	Fuse Holder	05920-401-03-14
		Other components not shown:	
		Cover, Top Mount Control Box	05700-002-23-03
		Decal, Warning-Disconnect Power	09905-100-75-93
		Screw, 10-32 x 3/8" Phillips Truss Head	05305-173-12-00
		Leg, Control Box	05700-002-33-05
		Screw, 1/4"-20 x 2 3/4" Hex Head Cap	05305-274-13-00
		Washer, 1/4"-20 ID S/S	05311-174-01-00
		Locknut, 1/4"-20 S/S Hex w/Nylon Insert	05310-374-01-00
		Connector, 1/2", 90° Plastic	05975-011-45-14
		Connector, 3/4", 45° Plastic	05975-011-47-74
		Connector, 1/2", 45° Plastic	05975-011-45-23
		Connector, 1/2", 90° Metal	05975-111-01-00
		Grommet, 1/2" OD x 3/8" ID	05325-011-46-73
		Grommet, 7/8" Split	05975-200-40-00
		Plug, 1/2"	05975-011-47-81
		Decal, Delime/Normal	09905-011-34-96
		Decal, L1, L2, L3	09905-101-12-66
		Decal, Copper Conductors	09905-011-47-35
		Decal, Ground	09905-011-86-86
		Associated Hardware:	
		Locknut, 6-32 S/S Hex w/Nylon Insert	05310-373-03-00
		Locknut, 10-24 S/S Hex w/Nylon Insert	05310-373-01-00
		Screw, 6-32 x 5/8"	05305-011-39-85
		Screw, 6-32 x 3/8" Phillips Round Head	05305-171-02-00
		•	

### SIDE MOUNTED CONTROL BOX ASSEMBLY



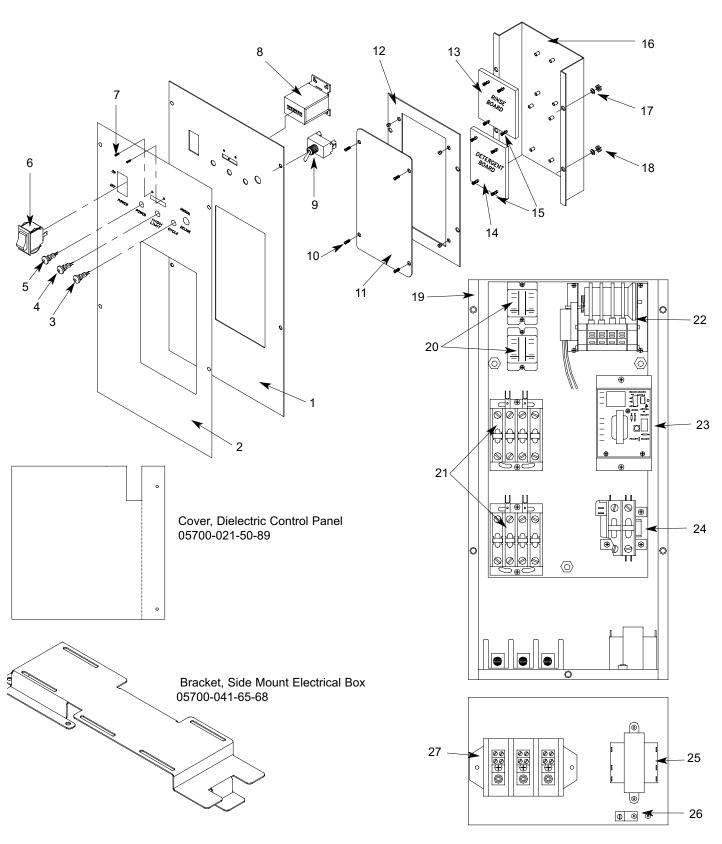
No.: 05305-011-39-85.

The mounting screws for the control box front cover (10-32  $\times$  1/2" Slotted Truss Head Screws) may be ordered using Mfg.

# SIDE MOUNTED CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Power Switch	05930-301-21-18
2	1	Cycle Counter	05990-111-47-42
3	1	Normal/Delime Switch	05930-301-46-00
4	1	Power Light	05945-504-06-18
5	1	High Limit Light	05945-504-07-18
6	1	Cycle Light	05945-504-08-18
7	1	Decal, Control Box Cover	09905-021-64-41
8	1	Control Box Cover	05700-031-91-45
9	1	Relay, Top Mount, Control	05945-111-47-51
10	1	Fuse Holder	05920-401-03-14
11	1	Timer, 60 Hz	05945-303-31-00
11	1	Timer, 50 Hz	05945-306-14-00
12	2	Contactor, 220V, 4 Pole (1 for Tempstar NB models)	05945-109-01-69
13	1	Liquid Level Control Board	06680-200-08-21
14	2	Screw, 6-32 x 5/8" Long	05305-011-39-85
15	1	Wash Motor Contactor	05945-109-03-69
15	1	Wash Motor Contactor	05945-002-14-78
16	3	Screw, 10-32 x 3/8" Panhead	05305-173-26-00
17	1	Overload (460 Volt Unit)	05945-002-65-01
18	1	3 Pole Terminal Block	05940-011-48-27
19	1	Control Box Weldment	05700-041-47-55
20	1	Circuit Breaker, 2 AMP (460 Volt Unit)	05925-111-64-18
21	1	Transformer, (460-440 Volt Unit)	05950-111-65-93
21	1	Transformer, (380 Volt Unit)	05950-111-64-17
22	9	Screw, 6-32 x 3/8" Long	05305-171-02-00
23	3	Locknut, 10-24 w/Nylon Insert	05310-373-01-00
24	1	Ground Lug	05940-200-76-00
		Other components not shown:	
		Connector, 1/2", 90° Plastic	05975-011-45-14
		Connector, 3/4", 45° Plastic	05975-011-47-74
		Connector, 1/2", 45° Plastic	05975-011-45-23
		Connector, 1/2", 90° Metal	05975-111-01-00
		Grommet, 1/2" OD x 3/8" ID	05325-011-46-73
		Grommet, 7/8" Split	05975-200-40-00
		Plug	05975-011-47-81
		Decal, Delime/Normal	09905-011-34-96
		Decal, L1, L2, L3	09905-101-12-66
		Decal, Copper Conductors	09905-011-47-35
		Decal, Ground	09905-011-86-86

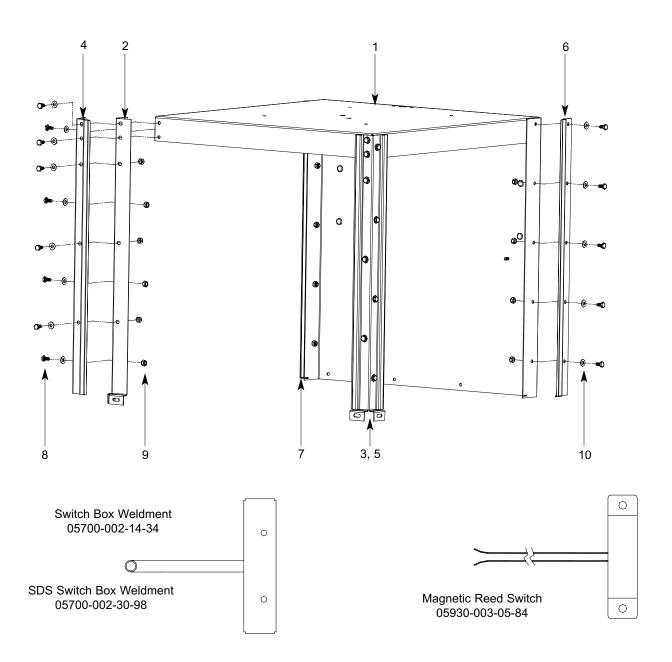
### SDS SIDE MOUNTED CONTROL BOX ASSEMBLY



# SDS SIDE MOUNTED CONTROL BOX ASSEMBLY (CONTINUED)

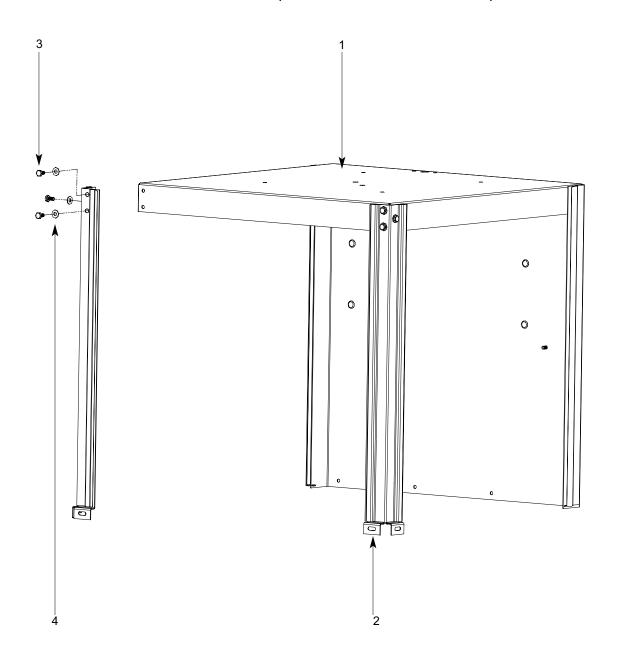
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Cover Weldment	05700-021-60-43
2	1	Decal, Control Box Cover	09905-021-50-13
3	1	Light, Amber	05945-504-06-18
4	1	Light, Green	05945-504-08-18
5	1	Light, Red	05945-504-07-18
6	1	Manual Wash Switch	05930-301-46-00
7	2	Screw, 4-40 x 1/4" Phillips Panhead	05305-011-36-92
8	1	Cycle Counter	05990-111-47-42
9	1	Wash Switch	05930-301-21-18
10	4	Screw, 10-32 x 3/8" Phillips Panhead	05305-173-04-00
11	1	Cover, Electrical Box Panel	05700-011-49-23
12	1	Frame, Electrical Box Cover Panel	05700-011-49-22
13	1	Board, PC Rinse	06680-111-50-55
14	1	Board, PC Detergent	06680-111-50-54
15	8	Screw, 6-32 x 3/8" Long	05305-171-02-00
16	1	Bracket, PC Board	05700-011-49-24
17	4	Lockwasher, #10 Internal Tooth	05311-011-59-51
18	4	Locknut, 10-24 w/Nylon Insert	05310-373-01-00
19	1	Control Box Weldment	05700-041-47-55
20	2	Relay, Top Mount, Control	05945-111-47-51
21	2	Contactor, 220V, 4 Pole	05945-109-01-69
22	1	Timer, 60 HZ	05945-303-31-00
23	1	Liquid Level Control Board	06680-200-08-21
24	1	Contactor, 220V, 2 Pole	05945-109-03-69
24	1	Wash Motor Contactor (460 Volt Unit)	05945-002-14-78
24	1	Overload (460 Volt Unit)	05945-002-33-42
25	1	Transformer	05950-400-01-35
25	1	Transformer (380 Volt Unit)	05950-111-64-17
25	1	Transformer (460 Volt Unit)	05950-111-65-93
26	1	Ground Lug	05940-200-76-00
27	1	3 Pole Terminal Block	05940-011-48-27
28*	1	Fuse Holder (460 Volt Unit)	05940-401-03-14
29*	1	Circuit Breaker, 2 AMP (460 Volt Unit)	05925-111-64-18
		Other components not shown:	
		Connector, 1/2", 90° Plastic	05975-011-45-14
		Connector, 3/4", 45° Plastic	05975-011-47-74
		Connector, 1/2", 45° Plastic	05975-011-45-23
		Connector, 1/2", 90° Metal	05975-111-01-00
		Grommet, 1/2" OD x 3/8" ID	05325-011-46-73
		Grommet, 7/8" Split	05975-200-40-00
		Plug, 1/2"	05975-011-47-81
		Decal, Delime/Normal	09905-011-34-96
		Decal, L1, L2, L3	09905-101-12-66
		Decal, Copper Conductors	09905-011-47-35
		Decal, Ground	09905-011-86-86

# SECTION 5: PARTS SECTION HOOD ASSEMBLY



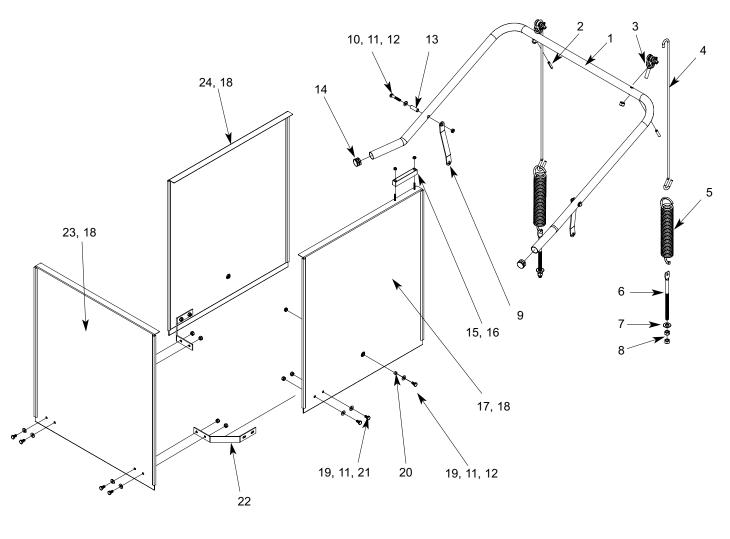
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment (Tempstar/Tempstar LT/Tempstar NB)	05700-041-94-39
1	1	Hood Weldment (Tempstar SDS)	05700-041-47-87
2	1	Left Front Hood Support	05700-021-33-18
3	1	Right Front Hood Support	05700-021-33-17
4	1	Double Door Guide, Front Left	05700-021-33-20
5	1	Double Door Guide, Front Right	05700-021-33-19
6	1	Guide, Right Rear	05700-021-84-70
7	1	Guide, Left Rear	05700-021-84-71
8	28	Screw, 1/4"-20 x 1/2" Long	05305-274-02-00
9	28	Locknut, 1/4"-20 with Nylon Insert	05310-374-01-00
10	28	Washer, 1/4"-20 ID, S/S, Flat	05311-174-01-00

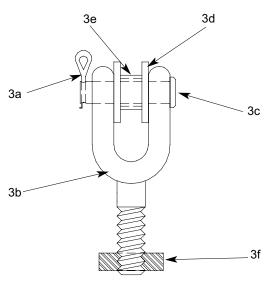
# HOOD ASSEMBLY (BOLTED SINGLE SUPPORT DESIGN)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment (Tempstar/Tempstar LT/Tempstar NB)	05700-002-29-79
1	1	Hood Weldment (Tempstar SDS)	05700-002-36-91
2	2	Hood Support	05700-002-78-99
3	6	Bolt, 1/4"-20 x 1/2" Long	05305-274-21-00
4	6	Washer, Flat, SS, 1/4"-20 ID	05311-174-01-00
5	6	Locknut, 1/4"-20 with Nylon Insert (Not Shown)	05310-374-01-00
6	4	Block Spacer	05700-002-81-02

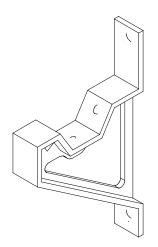
#### **CANTILEVER ARM/DOOR ASSEMBLIES**





# CANTILEVER ARM/DOOR ASSEMBLIES (CONTINUED)

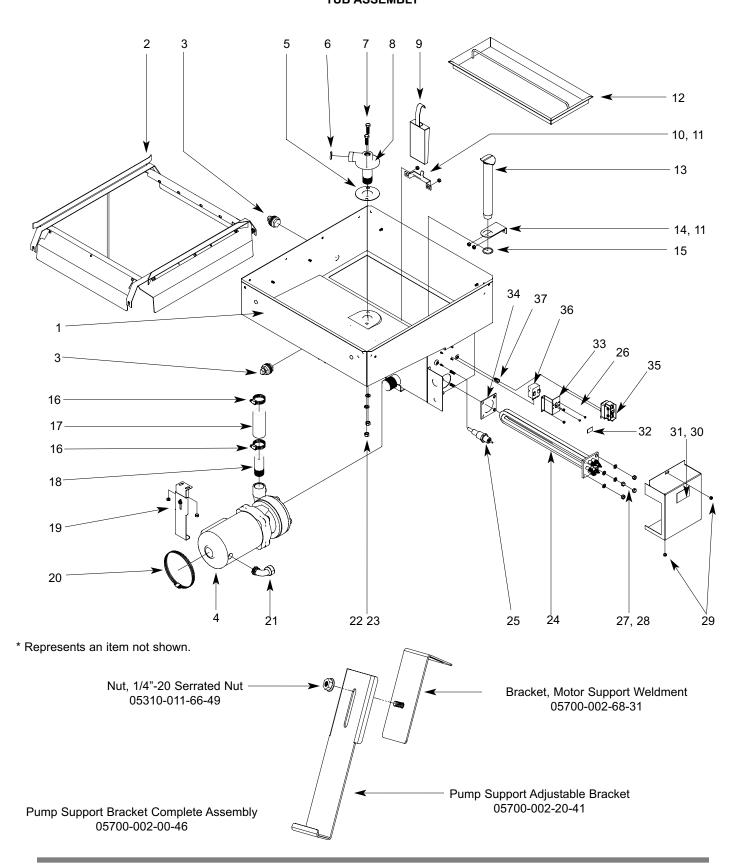
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Cantilever Arm	05700-031-50-67
2	2	Spring Pin, 1/4" x 1 1/8"	05315-407-06-00
3	2	Yoke Assembly	05700-000-75-77
3a	1	Cotter Pin	05315-207-01-00
3b	1	Yoke	05700-000-75-78
3c	1	Clevis Pin, 5/16" x 1 3/8"	05315-700-01-00
3d	2	Nylon Washer	05311-369-03-00
3e	1	Bushing	03120-100-03-00
3f	2	Locknut, 3/8"-16 S/S Hex Center	05310-256-04-00
4	2	Rod, Spring	05700-002-29-38
5	2	Spring	005340-109-02-
00			
6	2	Bolt, Cantilever Hanger Eye 3/8"-16	05306-956-05-00
7	2	Washer, 3/8" ID x 7/8" OD S/S	05311-176-02-00
8	4	Nut, 3/8"-16 S/S Hex	05310-276-01-00
9	2	Connector, Cantilever Arm	05700-011-90-99
10	2	Screw, 1/4"-20 x 1 1/2" Long S/S	05305-274-23-00
11	4	Washer, 1/4" S/S	05311-174-01-00
12	4	Locknut, 1/4"-20 S/S Hex with Nylon Insert Low Profile	05310-374-02-00
13	2	Sleeve, Cantilever Arm	05700-000-85-69
14	2	Plug, Cantilever Arm	05340-011-35-00
15	1	Magnet, Reed Switch	05930-111-51-68
16	2	Locknut, 8-32 S/S Hex with Nylon Insert	05310-272-02-00
17	1	Door, Right Side (Complete Assembly)	05700-002-30-88
17A	1	Right Door Weldment with Studs	05700-002-29-85
18	6	Door, Guides	05700-111-33-59
19	2	Screw, 1/4"-20 x 1/2" Long S/S	05305-274-02-00
20	2	Spacer, PB Bolt	05700-000-29-40
21	4	Locknut, 1/4"-20 S/S Hex with Nylon Insert	05310-374-01-00
22	2	Door Connector Bracket	05700-021-33-39
23	1	Door, Front (Complete Assembly)	05700-002-30-89
23A	1	Door Only, Front	05700-002-29-83
24	1	Door, Left Side (Complete Assembly)	05700-002-30-87
24A	1	Door Only, Left Side	05700-002-29-86
25	4	Door Connecting Plate	05700-002-20-78
26*	2	Bracket, Cantilever Arm Support	05700-031-88-00
27*	6	Wear Button, 1/2" Dia. UHMW	05700-011-88-01



Bracket, Cantilever Arm Support 09515-003-15-64

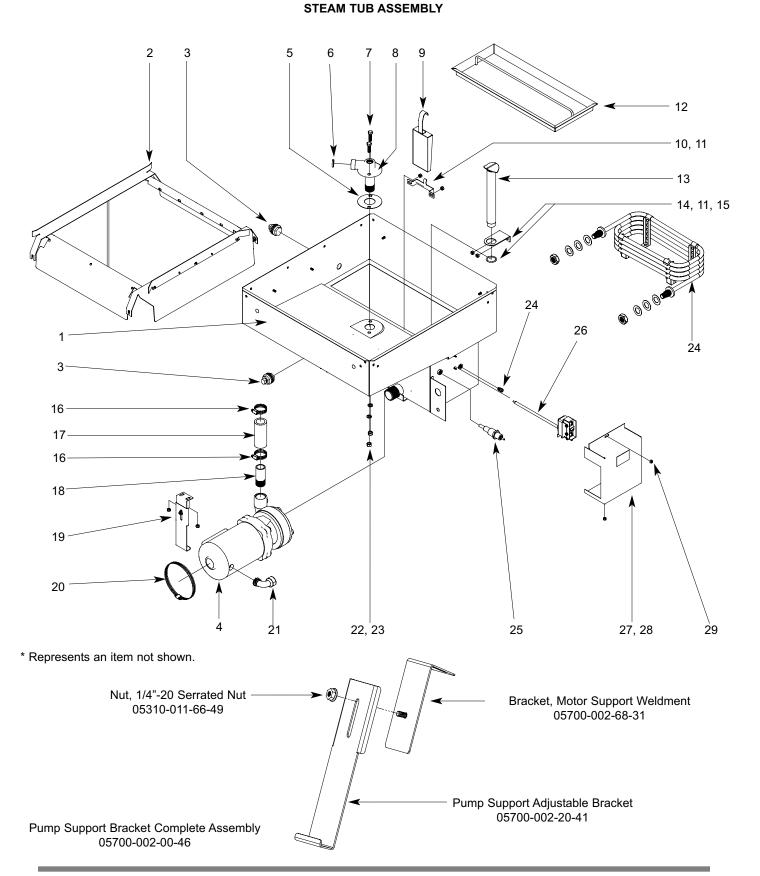
Wear Button, 1/2" Dia. UHMW 05700-011-88-01

# SECTION 5: PARTS SECTION TUB ASSEMBLY



# TUB ASSEMBLY (CONTINUED)

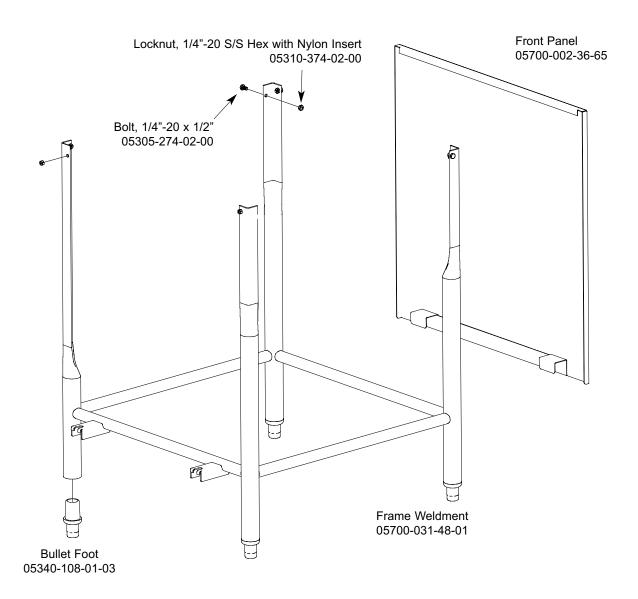
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Tub Weldment	05700-002-12-59
2	1	Rack Assembly	05700-002-01-00
3	2	Bulk Head Plug	04730-609-05-00
4	1	See Page Entitled "Wash Motors"	N/A
5	1	Gasket	05700-111-35-03
6	1	O-ring	05330-400-05-00
7	4	Bolt, Hex 3/8"-16 x 1 1/4" Long	05305-276-10-00
8	1	Lower Wash Manifold Weldment	05700-031-46-00
9	1	Suction Strain Weldment	05700-001-22-23
10	1	Suction Strain Bracket	05700-001-22-24
11	8	Locknut, 1/4"-20 with Nylon Insert	05310-374-02-00
12	1	Strainer Weldment	05700-021-50-07
13	1	Wash Overflow Weldment	05700-001-25-69
*	1	Support, Ball Stop Lift	05700-002-91-55
*	1	Ball Stop Lift	05700-002-31-53
*	1	Shim, Overflow Support	05700-002-91-34
14	1	Overflow Support Bracket	05700-002-90-48
15	1		05330-400-05-00
	2	O-Ring	
16		Clamp, Hose 1 5/16" to 2 1/4"	04730-719-01-37
17	1	Discharge Hose	05700-011-88-24
18	1	Nipple	05700-021-34-84
19	1	Pump Support Bracket Assembly	05700-002-00-46
20	1	Clamp, Hose 5 5/8" to 6"	04730-011-34-90
21	1	Connector, 1/2" 90°	05975-111-01-00
22	4	Nut, 3/8"-16 S/S Hex	05310-276-01-00
23	4	Lockwasher 3/8"	05311-276-01-00
24	1	See Page Entitled "Wash Heaters/Rinse Heaters"	N/A
		See page 27 to order phase conversion kits for the heater.	
25	1	Probe, High Water	06680-200-02-68
26	5	Locknut, 6-32 with Nylon Insert	05310-373-03-00
27	4	Lockwasher, 5/16", S/S, Split	05311-275-01-00
28	4	Nut, Hex, 5/16"-18, S/S	05310-275-01-00
29	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
30	1	Cover, Wash Heater	05700-031-47-57
31	1	Decal, Warning-Disconnect Power	09905-100-75-93
32	1	Decal, High Limit	09905-011-84-32
33	1	Thermostat Bracket	05700-011-81-64
34	1	Wash Heater Gasket	05330-011-47-79
35	1	Thermostat, Regulating	05930-510-02-79
	1	Kit, Wash Thermostat Replacement	
		(Includes: thermostat, brass fitting, 2 jumper wires & instructions)	06401-003-18-22
36	1	Thermostat, High Limit	05930-011-49-43
37	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
Items f	for side-	mounted control box not shown:	
*	1	Gauge Bracket (Side Mount Control Box Only)	05700-011-48-08
*	1	Thermometer, Wash (Side Mount Control Box Only)	06685-111-40-38
*	1	Thermometer, Rinse (Side Mount Control Box Only)	06685-111-40-39
		,	



# STEAM TUB ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Tub Weldment	05700-002-09-26
2	1	Rack Assembly	05700-002-01-00
3	2	Bulk Head Plug	04730-609-05-00
4	1	See page entitled "Wash Motors"	N/A
5	1	Gasket	05700-111-35-03
6	1	O-ring	05330-400-05-00
7	4	Bolt, Hex 3/8"-16 x 1 1/4" Long	05305-276-10-00
8	1	Lower Wash Manifold Weldment	05700-031-46-00
9	1	Suction Strain Weldment	05700-001-22-23
10	1	Suction Strain Bracket	05700-001-22-24
11	8	Locknut, 1/4"-20 with Nylon Insert	05310-374-02-00
12	1	Strainer Weldment	05700-021-50-07
13	1	Wash Overflow Weldment	05700-001-25-69
*	1	Support, Ball Stop Lift	05700-002-91-55
*	1	Ball Stop Lift	05700-002-91-54
*	1	Shim, Overflow Support	05700-002-96-48
14	1	Overflow Support Bracket	05700-001-27-55
15	1	O-Ring	05330-400-05-00
16	2	Clamp, Hose 1 5/16" to 2 1/4"	04730-719-01-37
17	1	Discharge Hose	05700-011-88-24
18	1	Nipple	05700-021-34-84
19	1	Pump Support Bracket Assembly	05700-002-00-46
20	1	Clamp, Hose 5 5/8" to 6"	04730-011-34-90
21	1	Connector, 1/2" 90 Deg.	05975-111-01-00
22	4	Nut, 3/8"-16 S/S Hex	05310-276-01-00
23	4	Lockwasher 3/8"	05311-276-01-00
24	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
25	1	Probe, High Water	06680-200-02-68
26	1	Thermostat, Regulating	05930-510-02-79
	1	Kit, Wash Thermostat Replacement	
		(Includes: thermostat, brass fitting, 2 jumper wires & instructions)	06401-003-18-67
27	1	Cover, Wash Heater	05700-031-47-57
28	1	Decal, Warning-Disconnect Power	09905-100-75-93
29	2	Locknut, 10-24 with Nylon Insert	05310-373-01-00
30	3	Locknut, 6-32 with Nylon Insert	05310-373-03-00

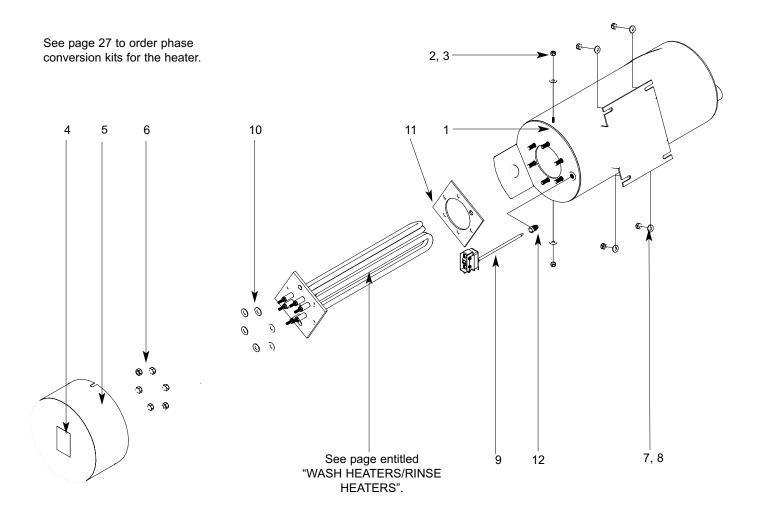
# SECTION 5: PARTS SECTION FRAME ASSEMBLY





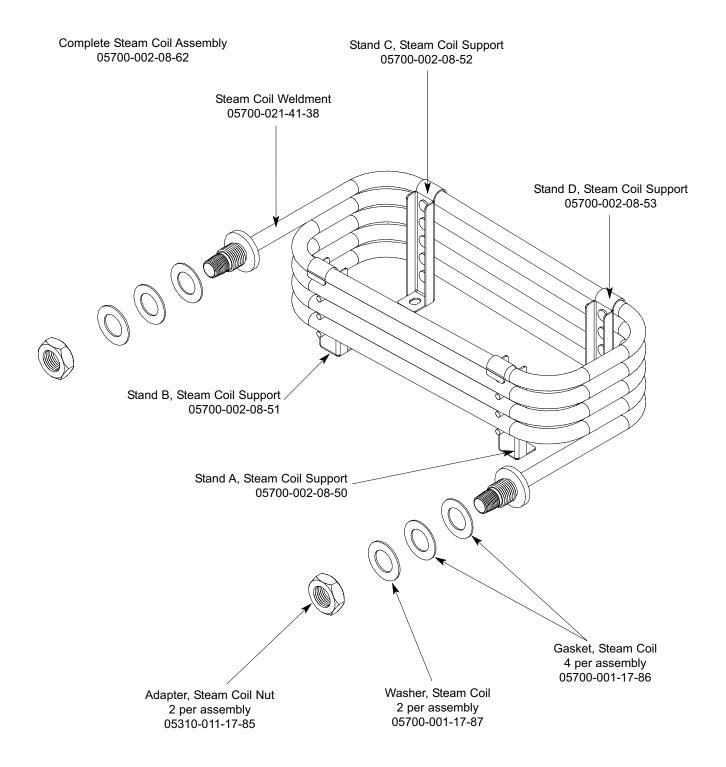
Flanged Bullet Foot 05340-002-34-86

#### **RINSE TANK ASSEMBLY**

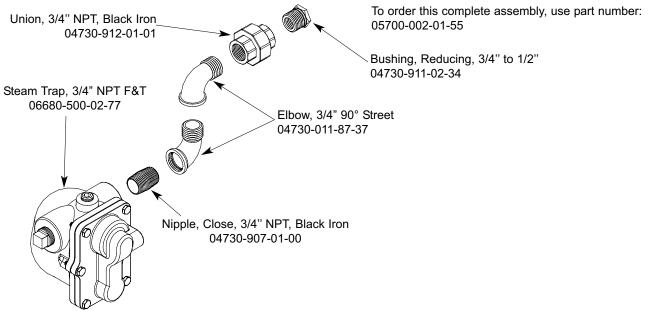


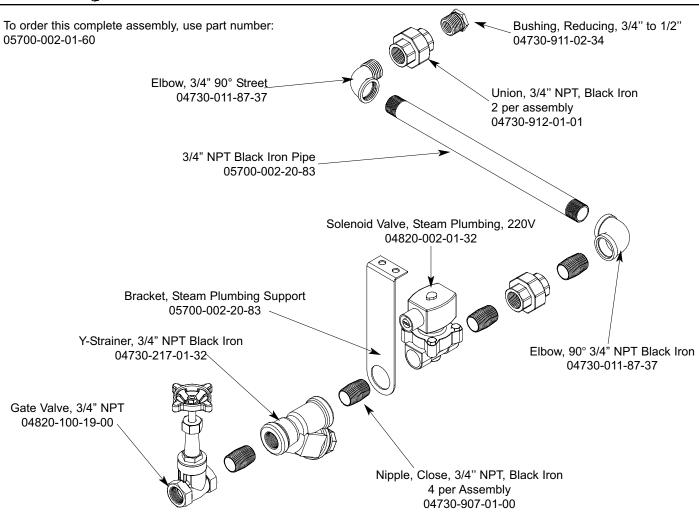
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Booster Tank Weldment	05700-001-22-02
2	2	Locknut, 10-24 with Nylon Insert	05310-373-01-00
3	2	Washer, #10 S/S Flat	05311-173-01-00
4	1	Decal, Warning - Disconnect Power	09905-100-75-93
5	1	Booster Tank Cover Weldment	05700-001-29-30
6	6	Nut, Hex, 5/16"-18	05310-275-01-00
7	4	Locknut, 1/4"-20 with Nylon Insert	05310-374-01-00
8	4	Washer, 1/4" ID, S/S, Flat	05311-174-01-00
9	1	Thermostat, Rinse	05930-510-03-79
	1	Kit, Rinse Thermostat Replacement	
		(Includes: thermostat, brass fitting, 2 jumper wires & instructions)	06401-011-66-55
10	6	Washer, 5/16" I.D.	05311-175-01-00
11	1	Gasket, Rinse Heater	05330-200-02-70
12	1	Fitting, 1/4" Imperial Brass	05310-924-02-05

**COIL ASSEMBLY** 



# SECTION 5: PARTS SECTION INCOMING STEAM PLUMBING ASSEMBLIES





#### **WASH MOTORS**

The Tempstar models covered in this manual come supplied with various wash motor assemblies (a wash motor assembly includes the wash motor and the pump end), depending on the characteristics of the machine. To ensure that you order the correct wash motor assembly for the model you are servicing, please refer to the following table:

<u>Model</u>	<u>Volts</u>	<u>Hz</u>	<u>Phase</u>	Wash Motor Assembly
Tempstar/Tempstar NB	208	50	1	06105-002-19-87
Tempstar/Tempstar NB	208	50	3	06105-002-19-87
Tempstar/Tempstar NB	208	60	1	06105-002-69-78
Tempstar/Tempstar NB	208	60	3	06105-002-69-78
Tempstar/Tempstar NB	230	50	1	06105-002-19-87
Tempstar/Tempstar NB	230	50	3	06105-002-19-87
Tempstar/Tempstar NB	230	60	1	06105-002-69-78
Tempstar/Tempstar NB	230	60	3	06105-002-69-78
Tempstar/Tempstar NB	380	50	3	06105-002-41-24
Tempstar/Tempstar NB	415	50	3	06105-002-41-24
Tempstar/Tempstar NB	440	50	3	06105-002-41-24
Tempstar/Tempstar NB	460	60	3	06105-121-64-21
Tempstar LT	208	50	1	06105-002-19-87
Tempstar LT	208	50	3	06105-002-19-87
Tempstar LT	208	60	1	06105-002-69-78
Tempstar LT	208	60	3	06105-002-69-78
Tempstar LT	230	50	1	06105-002-19-87
Tempstar LT	230	50	3	06105-002-19-87
Tempstar LT	230	60	1	06105-002-69-78
Tempstar LT	230	60	3	06105-002-69-78
Tempstar LT	380	50	3	06105-002-41-24
Tempstar LT	415	50	3	06105-002-41-24
Tempstar LT	440	50	3	06105-002-41-24
Tempstar LT	460	60	3	06105-121-64-21
Tempstar SDS	208	50	1	06105-002-19-87
Tempstar SDS	208	50	3	06105-002-19-87
Tempstar SDS	208	60	1	06105-002-69-78
Tempstar SDS	208	60	3	06105-002-69-78
Tempstar SDS	230	50	1	06105-002-19-87
Tempstar SDS	230	50	3	06105-002-19-87
Tempstar SDS	230	60	1	06105-002-69-78
Tempstar SDS	230	60	3	06105-002-69-78
Tempstar SDS	380	50	3	06105-002-41-24
Tempstar SDS	415	50	3	06105-002-41-24
Tempstar SDS	440	50	3	06105-002-41-24
Tempstar SDS	460	60	3	06105-121-64-21
Tempstar S	208	60	1	06105-002-69-78
Tempstar S	208	60	3	06105-002-69-78
Tempstar S	230	60	1	06105-002-69-78
Tempstar S	230	60	3	06105-002-69-78

**Important note:** When servicing a wash motor, it is important to refer to the wiring schematic found on the motor, to ensure that the motor is wired correctly. Different manufacturers of motors may not use the same wire color codes and therefore, your new motor, which may have been built by someone different than who built your original motor, may not connect using the same wires. Always refer to the wiring diagrams on the motor you are installing. If the motor you are installing has had the schematic removed, contact Jackson MSC immediately for technical support.

#### **MOTOR & PUMP ASSEMBLY**

Complete Pump & Motor Assembly, 60HZ 06105-002-69-78

Pump Only Assembly, 60HZ (Area indicated within box, Casing is included) 05700-002-79-51

Impeller Assembly, 60HZ

05700-002-81-86

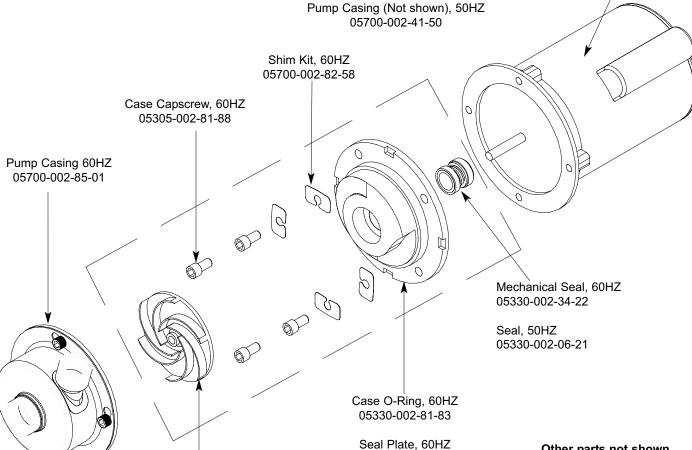
Impeller Assembly, 50HZ

05700-002-41-49

Complete Pump & Motor Assembly, 50HZ 06105-002-19-87

Pump Only Assembly, 50HZ (Area indicated within box, Casing is included) 05700-002-85-38 Motor Only, 60HZ 06105-002-79-61

Motor Only, 50HZ 06105-002-85-36



05700-002-81-87

Gasket, 50HZ

05330-002-41-48

Other parts not shown.

Drain Plug, 60HZ 04730-002-81-89

Bracket, 50HZ 05700-002-06-22

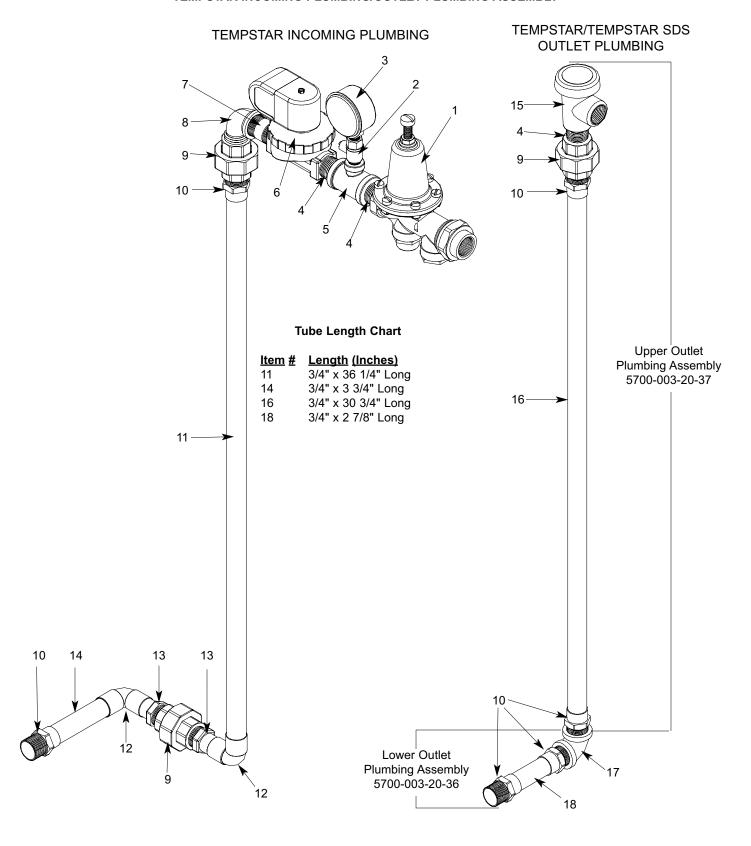
Shaft Adapter, 50HZ 05700-011-95-49

#### **WASH HEATERS/RINSE HEATERS**

The Tempstar models covered in this manual come supplied with various heaters, depending on the characteristics of the machine. To ensure that you order the correct heater for the model you are servicing, please refer to the following table:

<u>Model</u>	<u>Volts</u>	<u>Hz</u>	<u>Phase</u>	Wash Heater	Rinse Heater (12 KW)	Rinse Heater (14 KW)
Tempstar	208	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	208	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	208	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	208	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	230	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	230	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	230	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	230	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar	380	50	3	04540-002-44-31	04540-002-44-32	04540-121-63-38
Tempstar	415	50	3	04540-002-43-09	04540-002-43-10	04540-002-77-24
Tempstar	440	50	3	04540-121-65-99	04540-100-01-15	04540-121-63-39
Tempstar	460	60	3	04540-121-65-99	04540-100-01-15	04540-121-63-39
Tempstar LT	208	50	1	04540-121-47-39		
Tempstar LT	208	50	3	04540-121-47-39		
Tempstar LT	208	60	1	04540-121-47-39		
Tempstar LT	208	60	3	04540-121-47-39		
Tempstar LT	230	50	1	04540-121-47-39		
Tempstar LT	230	50	3	04540-121-47-39		
Tempstar LT	230	60	1	04540-121-47-39		
Tempstar LT	230	60	3	04540-121-47-39		
Tempstar LT	380	50	3	04540-002-44-31		
Tempstar LT	440	50	3	04540-121-65-99		
Tempstar LT	460	60	3	04540-121-65-99		
Tempstar NB	208	50	1	04540-121-47-39		
Tempstar NB	208	50	3	04540-121-47-39		
Tempstar NB	208	60	1	04540-121-47-39		
Tempstar NB	208	60	3	04540-121-47-39		
Tempstar NB	230	50	1	04540-121-47-39		
Tempstar NB	230	50	3	04540-121-47-39		
Tempstar NB	230	60	1	04540-121-47-39		
Tempstar NB	230	60	3	04540-121-47-39		
Tempstar NB	380	50	3	04540-002-44-31		
Tempstar NB	415	50	3	04540-002-43-09		
Tempstar NB	440	50	3	04540-121-65-99		
Tempstar NB	460	60	3	04540-121-65-99		
Tempstar SDS	208	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	208	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	208	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	208	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	230	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	230	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	230	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	230	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
Tempstar SDS	380	50	3	04540-002-44-31	04540-002-44-32	04540-121-63-38
Tempstar SDS	415	50	3	04540-002-43-09	04540-002-43-10	04540-002-77-24
Tempstar SDS	440	50	3	04540-121-65-99	04540-100-01-15	04540-121-63-39
Tempstar SDS	460	60	3	04540-121-65-99	04540-100-01-15	04540-121-63-39

#### TEMPSTAR INCOMING PLUMBING/OUTLET PLUMBING ASSEMBLY

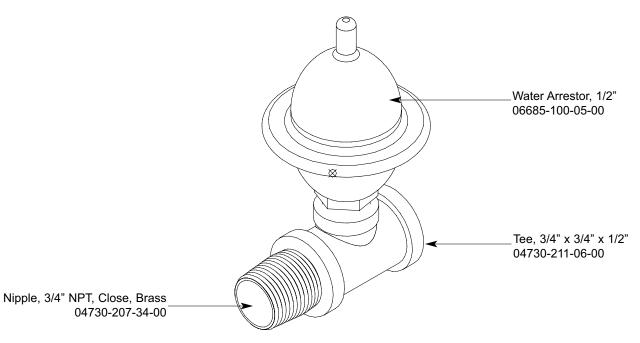


#### TEMPSTAR INCOMING PLUMBING/OUTLET PLUMBING ASSEMBLY/WPRK KIT OPTION

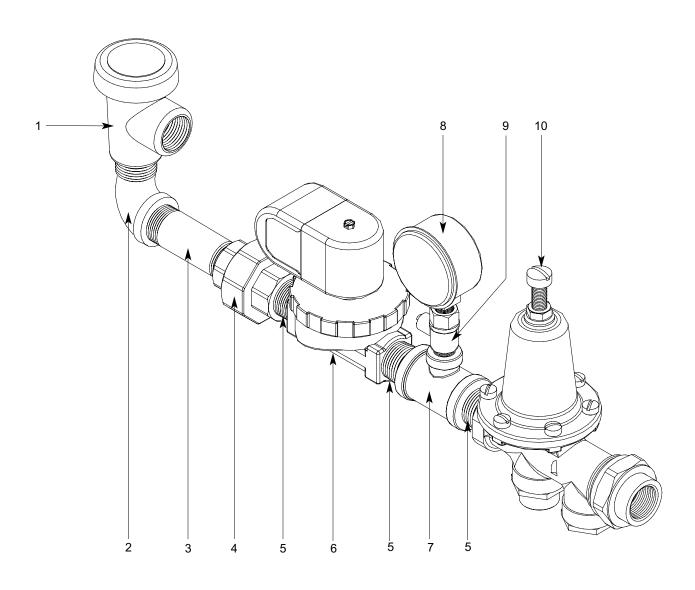
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Water Pressure Regulator, 3/4" NPT	06685-011-58-22
2	1	Valve, Ball, 1/4" NPT	04810-011-72-67
3	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
4	2	Nipple, Close, 3/4" NPT	04730-207-34-00
5	1	Tee, Brass, 3/4" NPT x 3/4" NPT x 1/4" NPT	04730-211-04-00
6	1	Valve, Solenoid, 3/4" NPT	04810-100-03-18
7	1	Nipple, Brass, 3/4" NPT x 2" Long	04730-207-46-00
8	1	Elbow, 3/4" NPT, Brass, Street	04730-206-04-34
9	3	Union, 3/4" NPT, Brass	04730-212-05-00
		O-ring	05330-003-
10	6	Adapter, 3/4" Male	04730-401-11-01
11	1	Tube, Copper	See Chart
12	2	Elbow, 3/4" CU x CU, 90°	04730-406-16-01
13	2	Adapter, 3/4", 604-2	04730-401-10-01
14	1	Tube, Copper	See Chart
15	1	Vacuum Breaker, 3/4" NPT	04820-002-53-77
16	1	Tube, Copper	See Chart
17	1	Elbow, 3/4" NPT, 90°, Brass	04730-206-13-00
18	1	Tube, Copper	See Chart

When servicing plumbing components, take care not to damage the threads of each individual item. Damaged threads can cause leaks and loss of pressure, which could adversely effect the performance of the Tempstar dishmachine. It is strongly recommended that teflon thread tape, used in conservative amounts, be applied to threads when joining components together. It is not advised to use thread sealing compounds, sometimes referred to as "pipe dope". Compounds can be ejected from the threads during the tightening process and become lodged in key components, thereby rendering them useless. Some of the components include the solenoid valve and the pressure gauge isolation ball valve.

#### **WPRK KIT OPTION**



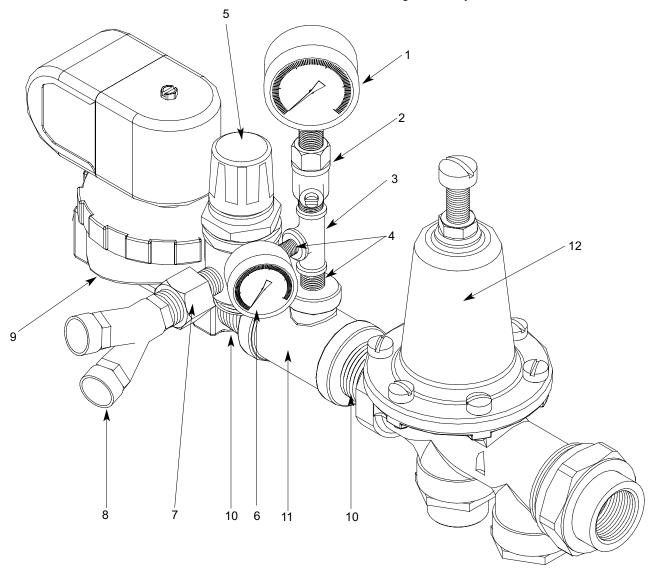
### TEMPSTAR LT & TEMPSTAR NB INCOMING PLUMBING ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Vacuum Breaker, 3/4" NPT	04820-002-53-77
2	1	Elbow, Brass, Street, 3/4" NPT	04730-206-04-34
3	1	Nipple, Brass, 3/4" NPT x 3" Long	04730-011-38-29
4	1	Union, Brass, 3/4" NPT	04730-212-05-00
5	3	Nipple, Close, Brass, 3/4" NPT	04730-207-34-00
6	1	Valve, Solenoid, 3/4" NPT	04810-100-03-18
7	1	Tee, Brass, 3/4" NPT x 3/4" NPT x 1/4" NPT	04730-211-04-00
8	1	Pressure Gauge, 0-100 PSI	06685-111-59-66
9	1	Valve, Ball, Bronze, 1/4" NPT	04810-011-72-67
10	1	Water Pressure Regulator, 3/4" NPT	06685-011-58-22

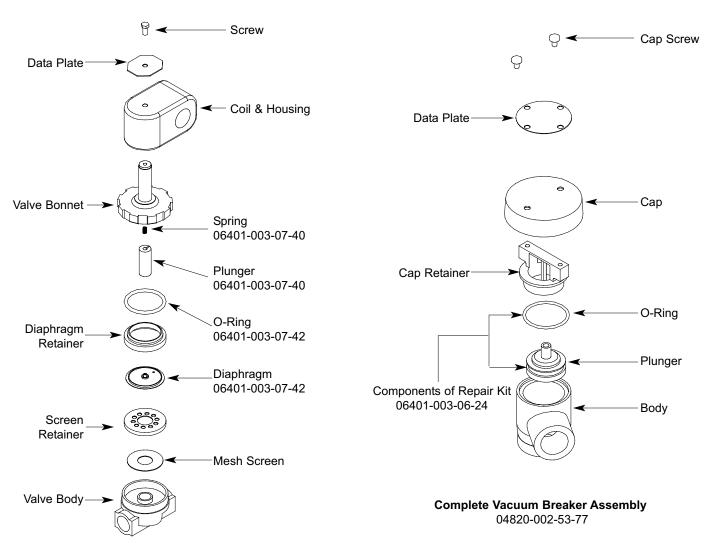
#### TEMPSTAR SDS INCOMING PLUMBING ASSEMBLY

Please refer to page 41, for component numbers 7 through 14 to connect to the Booster Tank. Refer to page 43 for the Outlet Plumbing Assembly.



IT	EM QTY	DESCRIPTION	Mfg. No.
1	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
2	1	Valve, Ball, 1/4" NPT	04810-011-72-67
3	1	Tee, 1/4" x 1/4" x 1/4" Brass	04730-011-51-20
4	2	Nipple, 1/4" Close Brass	04730-207-02-00
5	1	Regulator, Pressure	06685-111-48-54
6	1	Gauge, Pressure, 0-100 PSI 1/8"	06685-011-48-32
7	1	Reducer, 1/4" Male x 3/8" Female Brass	04730-011-59-40
8	1	Fitting, 3/8" Y-Branch	04730-111-58-21
9	1	Valve, Solenoid, 3/4" NPT	04810-100-03-18
10	) 2	Nipple, Close, 3/4" NPT	04730-207-34-00
11	1	Tee, Brass, 3/4" NPT x 3/4" NPT x 1/4" NPT	04730-211-04-00
12	2 1	Water Pressure Regulator, 3/4" NPT	06685-011-58-22

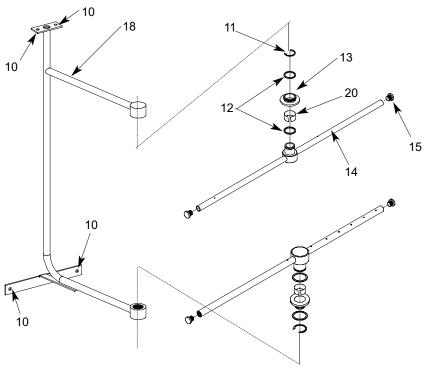
#### 3/4" SOLENOID VALVE & 3/4" NPT VACUUM BREAKER REPAIR PARTS KITS



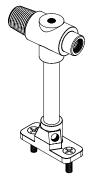
Complete 110 Volt Solenoid Valve Assembly 04810-100-53-00 Coil & Housing only 06401-003-07-43

Complete 240 Volt Solenoid Valve Assembly 04810-100-03-18 Coil & Housing only 06401-003-07-44

#### WASH & RINSE ARM/MANIFOLD ASSEMBLIES

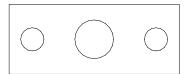


<u>DETAIL "A"</u> FINAL RINSE ARMS & MANIFOLD

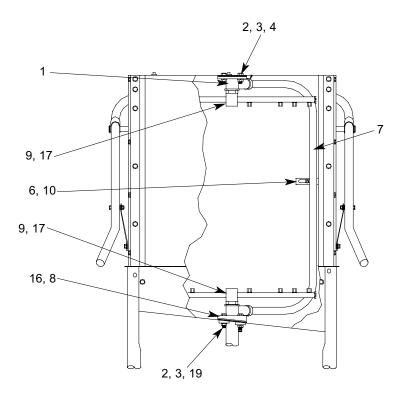


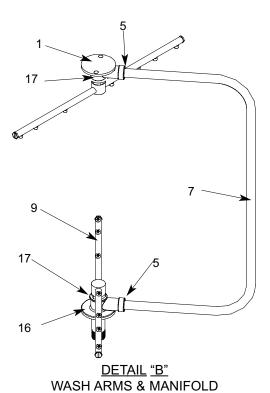
Rinse Injector Weldment 1 per machine 05700-021-47-65

Plug, 1/8" NPT, Brass 3 per Rinse Injector 04730-209-07-37



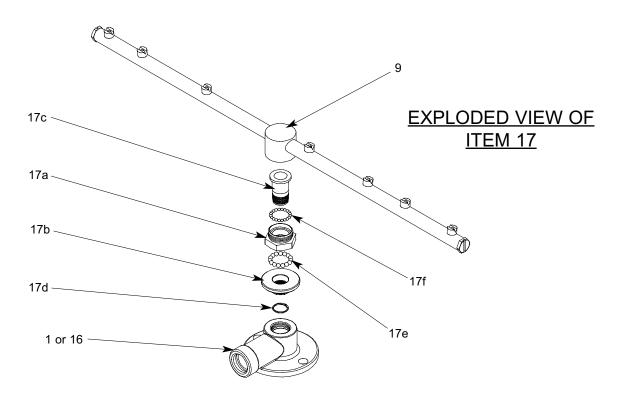
Rinse Injector Gasket 2 per machine 05330-111-42-81



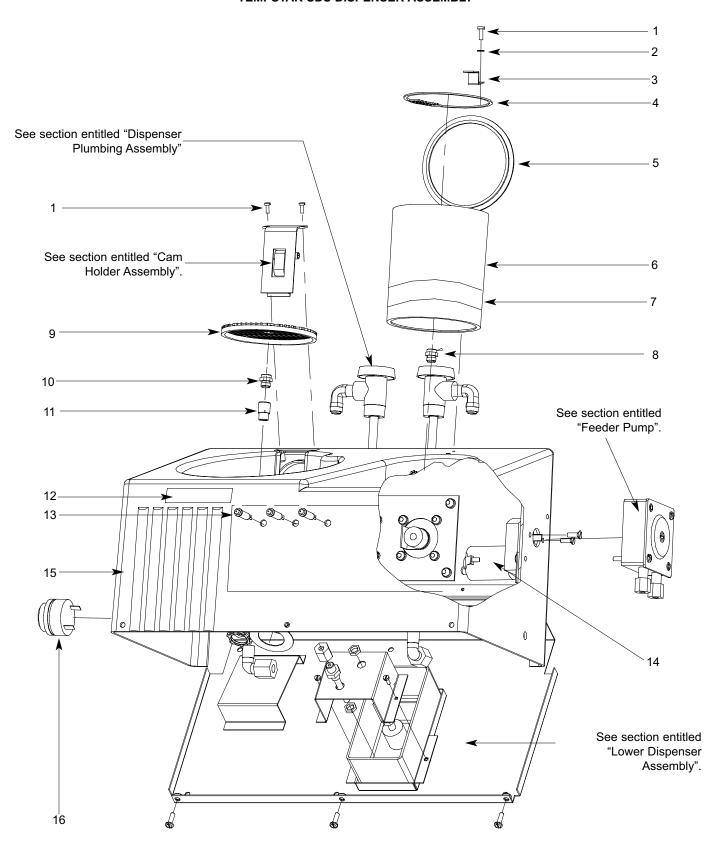


# WASH & RINSE ARM/MANIFOLD ASSEMBLIES (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Upper Manifold	05700-031-34-82
2	4	Nut, 3/8"-16 S/S Hex	05310-276-01-00
3	4	Lockwasher,3/8	05311-276-01-00
4	2	Bolt, Hex 3/8"-16 x 7/8" Long	05306-011-36-95
5	2	O Ring	05330-111-35-15
6	1	Positioning Bracket, Manifold Tube	05700-011-34-63
7	1	Tube, Wash Manifold	05700-131-15-07
8	2	Gasket, Manifold	05700-111-35-03
9	2	Wash Arm	05700-021-35-93
10	5	Locknut, 1/4"-20 S/S Hex with Nylon Insert	05310-374-01-00
11	2	Clip, Retaining, Rinse Head Bushing	05340-112-01-11
12	4	Rinse Arm Washer	05330-011-42-10
13	2	Bushing, Rinse Head	05700-021-33-84
14	2	Rinse Arm	05700-031-49-58
15	4	Plug, Rinse Arm	04730-609-04-00
16	1	Lower Wash Manifold	05700-031-46-00
17	2	Bearing Assembly	05700-021-35-97
17a	1	Hub Nut	05700-011-35-94
17b	1	Hub Bushing	05700-011-35-96
17c	1	Hub Spindle	05700-011-35-95
17d	1	Ring, Retainer	05340-011-37-81
17e	15	3/16" Stainless Steel Ball	03120-100-02-00
17f	20	1/8" Stainless Steel Ball	03120-011-37-82
18	1	Rinse Manifold Assembly	05700-021-47-61
19	2	Bolt, Hex 3/8"-16 x 1 1/4" Long	05305-276-10-00
20	2	Bearing, Rinse Head	03120-002-72-24



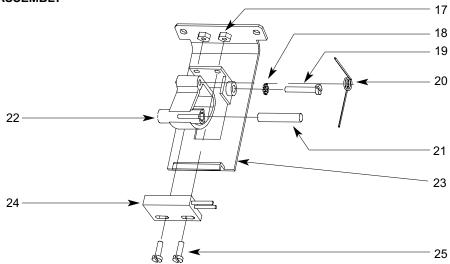
#### TEMPSTAR SDS DISPENSER ASSEMBLY



# TEMPSTAR SDS DISPENSER ASSEMBLY (CONTINUED)

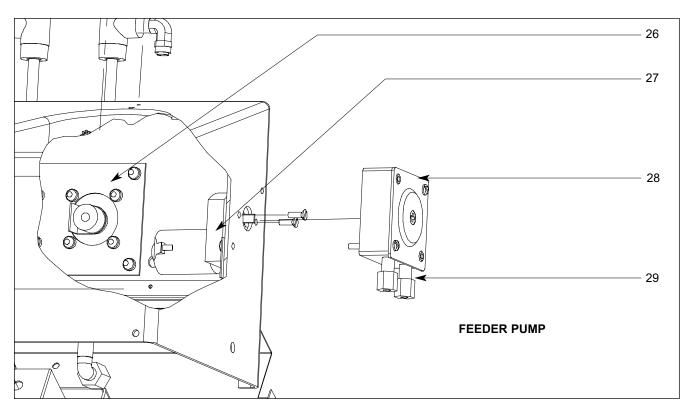
ITEM	QTY	DESCRIPTION	Mfg. No.
1	3	Screw, 6-32 x 3/4" Long	05305-171-07-00
2	1	Lockwasher, #6, External Tooth	05311-271-02-00
3	1	Rinse Cylinder Bracket	05700-011-59-72
4	1	Rinse Additive Screen	05930-011-48-66
5	1	Rinse Cylinder Cover	09515-011-49-01
6	1	Rinse Additive Cylinder	09515-031-49-00
7	1	Decal, Rinse Additive	09905-011-59-80
8	1	Rinse Aid Nozzle	04730-011-50-03
9	1	Detergent Screen	05335-011-48-65
10	1	Detergent Spray Nozzle	04730-011-50-04
11	1	Detergent Flush Pipe	05700-011-51-52
12	1	Decal, Detergent Additive	09905-011-59-79
13	3	Light, Red	05945-011-48-96
14	1	Motor, Feeder Pump	06105-111-51-02
15	1	Dispenser Molding	09515-031-48-62
16	1	Sonalert	05945-011-48-97

#### **CAM HOLDER ASSEMBLY**

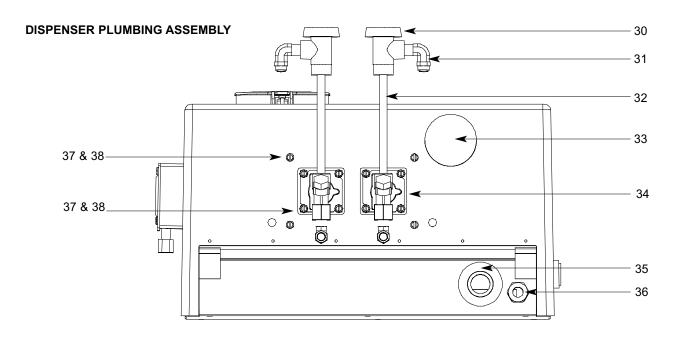


ITEM	QTY	DESCRIPTION	Mfg. No.
17	2	Locknut, 4-40	05310-279-06-00
18	1	Lockwasher, 4-40	05311-011-59-71
19	1	Screw, 4-40 x 3/4" Long	05305-011-59-64
20	1	Spring, .023 Wire	05340-111-58-02
21	1	Magnet, 3/16" x 1" Long Bar	05930-011-48-81
22	1	Holder, Cam Magnet	05340-011-48-80
23	1	Cam Holder	05340-011-59-62
24	1	Switch, 5A	05930-011-48-83
25	2	Screw, 4-40 x 3/8" Long	05305-011-59-70

### TEMPSTAR SDS DISPENSER ASSEMBLY (CONTINUED)

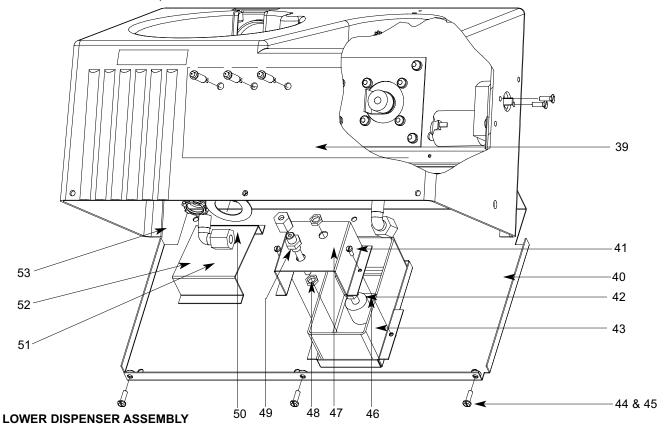


ITEM	QTY	DESCRIPTION	Mfg. No.
26	1	Plate, Solenoid Valve Mounting	05700-031-58-16
27	1	Plate, Pump Mounting	05700-011-57-88
28	1	Peristaltic Pump	04320-111-51-03
29	2	Ferrule Nut, Chemical Tube Connector	04730-609-16-00



# TEMPSTAR SDS DISPENSER ASSEMBLY (CONTINUED)

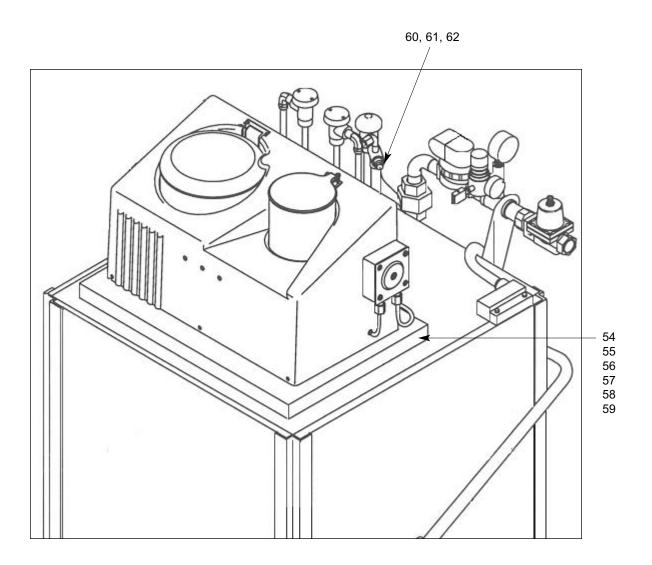
ITEM	QTY	DESCRIPTION	Mfg. No.
30	2	1/4" NPT Vacuum Breaker	04810-011-51-62
31	2	Elbow, 3/8" Comp. X 1/4" NPT, 90°, Brass	04730-111-58-18
32	2	Nipple, 1/4" x 6" Brass	04730-011-79-29
33	1	Plug, Hunky	05975-011-59-49
34	2	Valve, Solenoid	04810-011-48-99
35	1	Grommet, 1.25" O.D. x 1.00" I.D.	05975-111-58-01
36	1	Fitting, Liquid Tight	05975-011-49-03
37	12	Screw, 10-32 x 1/2" Long	05305-011-39-36
38	12	Lockwasher, #10 External Tooth	05311-273-03-00



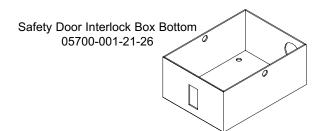
ITEM	QTY	DESCRIPTION	Mfg. No.
39	1	Decal, Dispenser Front	09905-021-50-18
40	1	Dispenser Mounting Plate	05700-031-50-12
41	2	Screw, 6-32 x 3/8" Long	05305-171-07-00
42	1	Switch, Float	05930-011-48-98
43	1	Reservoir	09515-031-48-63
44	3	Screw, 10-32 x 1/2" Long	05305-011-39-36
45	3	Lockwasher, #10 External Tooth	05311-273-03-00
46	1	Reservoir Clip	05700-021-49-26
47	1	Jam Nut, 1/8"-27	05310-011-58-00
48	1	Rinse Additive Pickup Tube	05700-011-50-14
49	1	Ferrule Nut, Chemical Tube Connector	04730-609-16-00
50	1	Panel, Dispenser Sliding Cover	05700-011-51-19
51	1	Fitting, Liquid Tight	05975-011-49-03
52	1	Elbow, 1/4" NPT x 3/8" Compression	04730-111-59-34
53	1	Insert, 3/8" Tubing P/P	04730-111-59-35

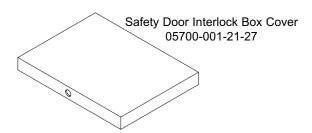
### TEMPSTAR SDS DISPENSER ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.	
54	1	Thermal Barrier Box Assembly	05700-021-48-14	
55	1	Thermal Box Top Weldment	05700-021-50-64	
56	1	Thermal Box Bottom Weldment	05700-021-50-65	
57	1	Foam, 1" Thick	05640-011-49-07	
58	3	Screw, 10-32 x 3/8" Phillips Pan Head	05305-173-26-00	
59	3	Lockwasher, #10 Internal Tooth	05311-273-03-00	
60	1	Valve, Check	04820-111-51-14	
61	1	Fitting, Outlet Elbow	04820-111-51-18	
62	1	Nut, P/P For 1/8" Tubing	04730-011-59-45	
Other components not shown:				
-	-	Sensor, Detergent	06680-011-49-83	
-	-	Kit, Detergent Sensor Mounting	04730-111-51-17	
-	-	Gasket, 1/8" Thick	05330-021-51-08	



#### SAFETY DOOR INTERLOCK (SDI) /EXHAUST FAN CONTROL/TRANSFORMER MOUNTING BOX

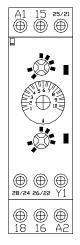




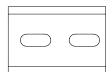
# Other Safety Door Interlock (SDI) components (not shown): DESCRIPTION

Pipe Clamp (found on the side of the machine) Solenoid, Electrical Interlock Option Relav

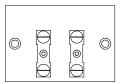
**Mfg. No.** 05700-000-35-05 04810-100-61-33 05945-111-47-51



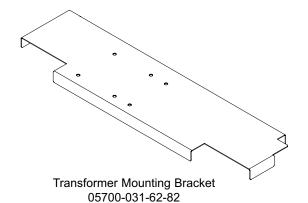
Exhaust Fan Control Delay Timer 05945-011-65-44

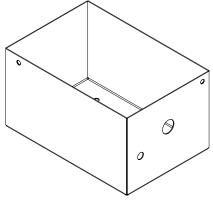


Exhaust Fan Control 2" Din Rail 05700-002-36-09



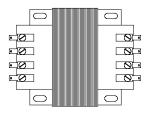
Exhaust Fan Control Terminal Board 05940-011-84-41





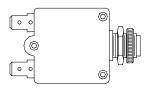
Transformer Mounting Box 05700-002-10-01

Transformer Mounting Box Top (not shown) 05700-000-78-53



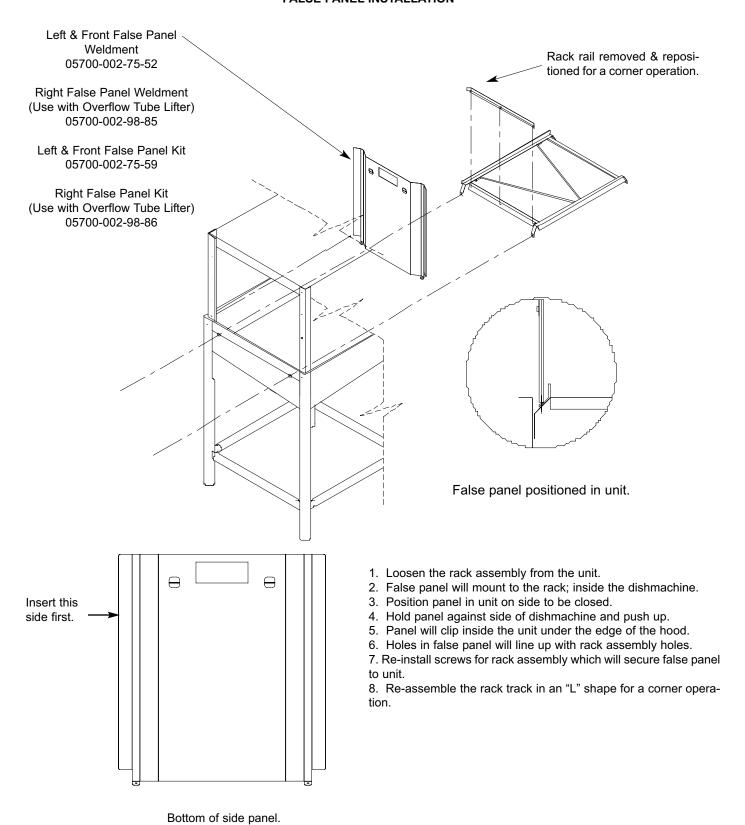
415/440/460V Transformer 05950-111-65-93

380V Transformer 05950-111-64-17



2 Amp Circuit Breaker 05925-111-64-18

# SECTION 5: PARTS SECTION FALSE PANEL INSTALLATION



# **SECTION 5: PARTS SECTION GO\*BOX COMPONENTS**

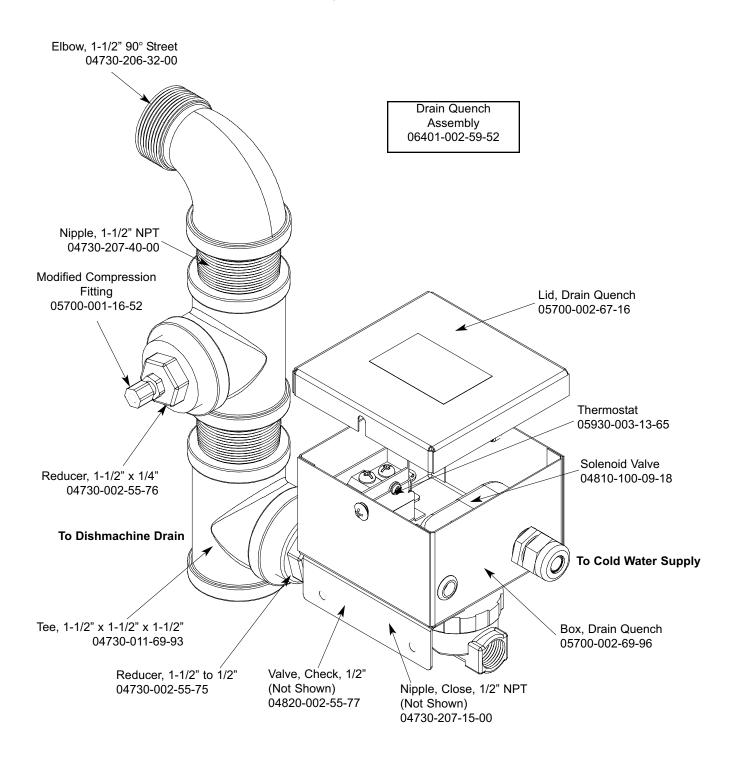
A GO\*BOX is a kit of the most needed parts for a particular model or model family to successfully effect a repair in the first call 90% or more of the time.

The following components may be ordered together using the following Mfg. No.: 06401-002-15-00.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Contactor, Rinse/Wash Heater	05945-109-01-69
2	1	Contactor, Wash Motor	05945-002-74-20
3	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
4	1	Thermometer, 96" Capillary	06685-111-68-49
5	1	Thermometer, 48" Capillary	06685-111-68-48
6	1	Thermostat, Rinse Operating	06401-140-00-33
7	1	Thermostat, Wash Operating	06401-140-00-32
8	1	Thermostat, Hi-Limit	05930-011-49-43
9	1	Liquid Level Control	06680-200-08-21
10	1	Probe, water level sensing	06680-200-02-68
11	1	Magnet, Door	05930-111-51-68
12	6	Glide, Door Edge	05700-111-33-59
13	2	O-Ring Wash Manifold	05330-111-35-15
14	1	Relay,Control 240V 50/60Hz	05945-111-47-51
15	1	Seal, Mechanical Pump (S/S Pumps)	05330-002-34-22
16	1	O-Ring, Wash Pump Gasket	05330-002-81-83
17	1	Switch, Door, Magnetic Reed	05930-111-51-69
18	2	Snap Ring, Retaining, Rinse Arm	05340-112-01-11
19	1	Bearing Assembly, Wash Arm	05700-021-35-97
20	1	Switch, Power Push Button	05930-002-29-13
21	1	Timer, Universal	05945-003-33-10
22	4	Washer, Rinse Arm Nylatron	05330-011-42-10
23	1	Vacuum Breaker 3/4" Brass	04820-002-53-77
24	1	Valve, Solenoid, 3/4", 220V	04810-100-03-18
*	1	Pump & Motor Assembly, S/S	06105-002-69-78

Special pricing available when purchased with above GO\*BOX. Call for details.

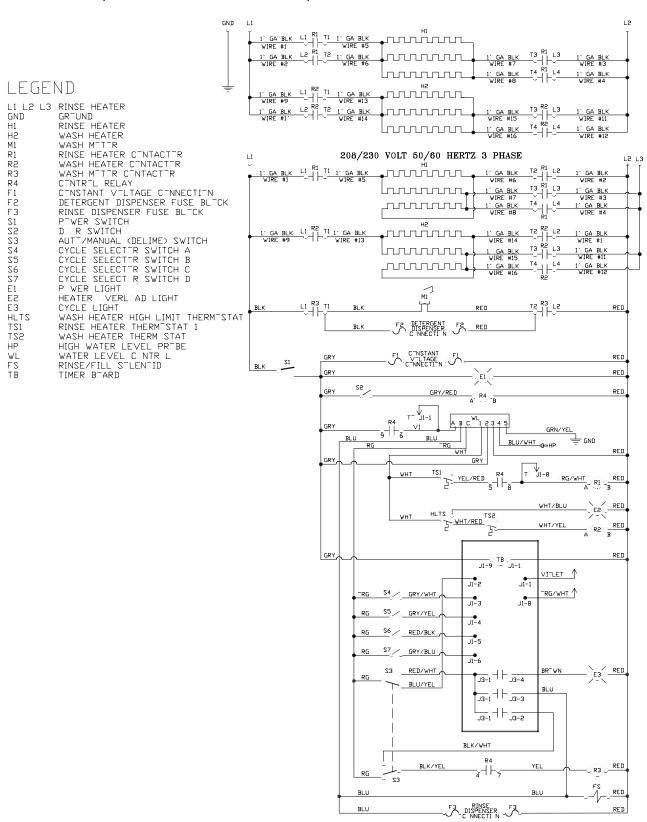
#### **DRAIN QUENCH ASSEMBLY**



From the existing drain, attach the two additional Tees using the 1-1/2" NPT Close Nipples. Tighten the Reducers into the Tees as shown above. Attach the Modified Compression Fitting into the 1-1/2" to 1/4" Reducer. Position the bulb of the thermostat so that it rests approximately 1/4" from the bottom of the Tee. Tighten the Modified Compression Fitting as required. Attach to the incoming cold water line. Use pipe dope or thread tape as required to prevent any leaks.

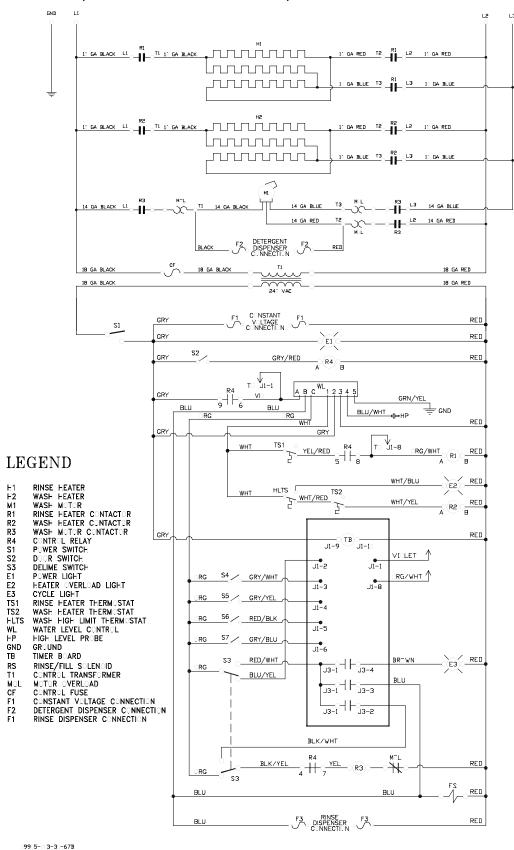
# SECTION 6A: ELECTRICAL SCHEMATICS FOR TOP MOUNT UNITS

#### TEMPSTAR (TOP MOUNT W/ CYCLE SWITCHES) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



19915-113-31-390

#### TEMPSTAR (TOP MOUNT W/ CYCLE SWITCHES) 460 VOLT - 60 HERTZ -THREE PHASE



Tempstar LT/NB/S/SDS Technical Manual 7610-011-86-35 Issued: 12-07-2007 Revised: N/A

#### TEMPSTAR LT & NB (TOP MOUNT W/ CYCLE SWITCHES) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE

208/230 VOLT 50/60 HERTZ SINGLE PHASE 1 GA BLACK WIRE #9 1 GA BLACK WIRE #13 1: GA BLACK WIRE #15 1. GA BLACK WIRE #11 1 GA BLACK WIRE #1 1 GA BLACK WIRE #14 L2 R2 –ੂਮ ⊦ੂ-1 GA BLACK WIRE #16 1 GA BLACK WIRE #12 208/230 VOLT 50/60 HERTZ 3 PHASE 1: GA BLACK WIRE #9 1: GA BLACK WIRE #1: 10 GA BLACK WIRE #14 1: GA BLACK WIRE #11 —<u>-</u>-⊢ 1 GA BLACK WIRE #16 1 GA BLACK WIRE #12 R2 M1 BLACK RED RED DETERGENT DISPENSER C NNECTI N CONSTANT RED V LTAGE C NNECTI N RED GREY GRY/RED RED LEGEND LEGEND

LI L2 L3 RINSE HEATER
GND GR UND
H1 RINSE HEATER
H2 WASH HEATER
M1 WASH MIT R
R1 RINSE HEATER C NTACT R
R2 WASH HEATER C NTACT R
R3 WASH MIT R C NTACT R
R4 C NTR L RELAY
F1 C NSTANT V LTAGE C NNECTI N
F2 DETERGENT DISPENSER C NNECTI N
F3 RINSE DISPENSER C NNECTI N
F3 RINSE DISPENSER C NNECTI N
S1 P WER SWITCH
S2 D R SWITCH
S3 AUT /MANUAL (DELIME) SWITCH
S4 CYCLE SELECT R SWITCH A
S5 CYCLE SELECT R SWITCH B
S6 CYCLE SELECT R SWITCH C
S7 CYCLE SELECT R SWITCH D
E1 P WER LIGHT
E2 HEATER VERL AD LIGHT
E3 CYCLE LIGHT
HLTS WASH HEATER HIGH LIMIT THERM STAT
TS1 RINSE HEATER THERM STAT
HP HIGH WATER LEVEL PR BE
WU WATER LEVEL C NTR I √ J1-1 VL. GPN/YFI BLUE BLUE BLU/WHT RANGE RANGE RED RED WHITE WHITE GREY WHT/BLU RED HLTS WHITE RED VILLET 1 **↓** J1=1 **S4** RG/WHT ↑ \_\_GRY/WH1 J1-3 WASH NEATER THEM STATE
HIGH WATER LEVEL C NTR L
RINSE/FILL S LENGID
TIMER BEARD HP WL FS TB S5 GRY/YEL S6 \_\_\_RED/BLK J1-5 S7 GRY/BLU J1-6 CONTROL BOX LAYOUT S3 RED/WHT BLU/YEL J3-1 | -J3-3 E1 E2 E3 S1 └<u>─</u>्-| |-<u></u> J3-1 TB R4 BLK/WHT WL R3 RED 23 R3 RED RINSE DISPENSER C NNECTI N RED L1 L2 L3

> Tempstar LT/NB/S/SDS Technical Manual 7610-011-86-35 Issued: 12-07-2007 Revised: N/A

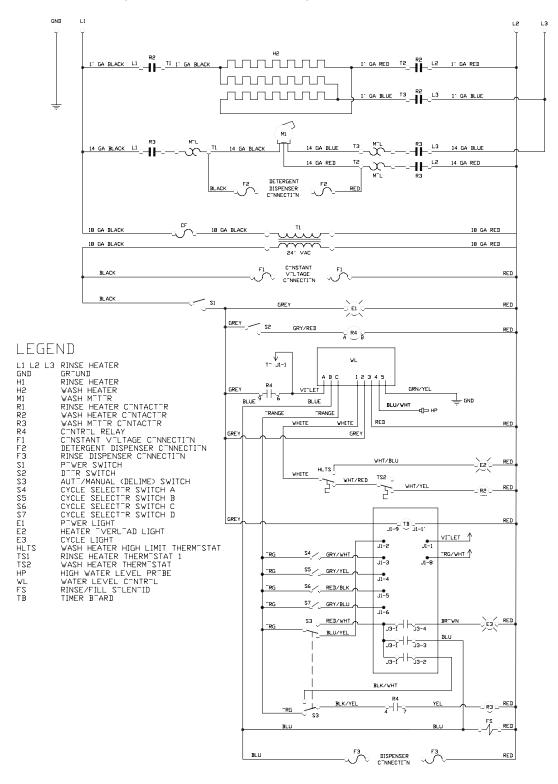
GND

FUSE

S3

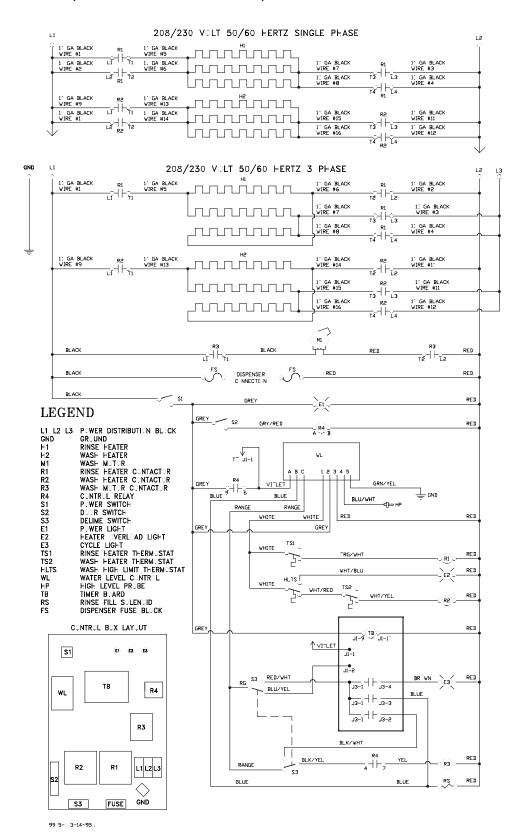
9905-03-14-97B

#### TEMPSTAR LT & NB (TOP MOUNT W/ CYCLE SWITCHES) 460 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE

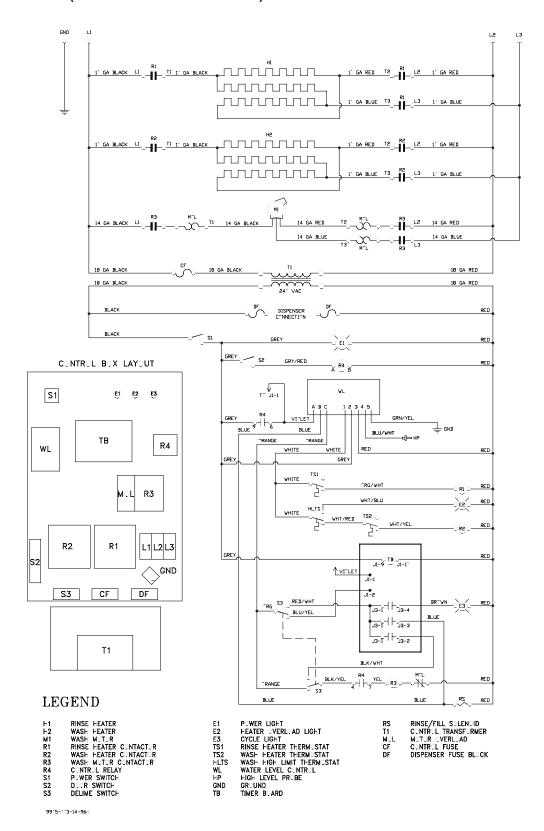


9905-003-14-98B

#### TEMPSTAR (TOP MOUNT UNIVERSAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



#### TEMPSTAR (TOP MOUNT UNIVERSAL TIMER) 380-440-460 VOLT - 50/60 HERTZ - THREE PHASE



#### TEMPSTAR LT & TEMPSTAR NB (TOP MOUNT UNIVERSAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE

208/230 VOLT 50/60 HERTZ SINGLE PHASE L1 L2 10 GA BLACK WIRE #9 1 GA BLACK WIRE #1 LĪ 10 GA BLACK WIRE #14 10 GA BLACK WIRE #15 –ੂ⊣ ⊢ੂ<u>–</u> 10 GA BLACK WIRE #16 10 GA BLACK WIRE #12 GND 208/230 VOLT 50/60 HERTZ 3 PHASE L5 10 GA BLACK WIRE #10 R2 1 GA BLACK WIRE #11 10 GA BLACK WIRE #16 10 GA BLACK WIRE #12 R2 М1 BLACK BLACK RED RED BLACK RED DISPENSER CONNECTION BLACK RED GREY ) EI (O LEGEND 22 GRY/RED RED L1 L2 L3 POWER DISTRIBUTION BLOCK GROUND WASH HEATER WASH MOTOR GND H2 M1 R2 T□ J1-1 WL WASH HEATER CONTACTOR
WASH MOTOR CONTACTOR
CONTROL RELAY R3 R4 S1 S2 S3 E1 E2 E3 TS2 ABC GRN/YEL BLUE 9 POWER SWITCH DOOR SWITCH DELIME SWITCH POWER LIGHT BLUE BLU/WHT -d ⊨ HF RANGE RANGE RED RED HEATER OVERLOAD LIGHT CYCLE LIGHT WHITE WHITE GREY CYCLE LIGHT
WASH FEATER THERMOSTAT
WASH HIGH LIMIT THERMOSTAT
WATER LEVEL CONTROL
HIGH LEVEL PROBE HLTS WL HP TB WHT/BLU HLTS TIMER BOARD WHITE RINSE FILL SOLENOID DISPENSER FUSE BLOCK 125 RS FS RED CONTROL BOX LAYOUT GREY RED \_\_\_\_\_(TB)\_\_\_\_\_ J1-1 E1 E2 E3 S1 **↑** ∨I□LET J1-1 J1-2 RED/WHT RED ТВ R4 WL BLU/YEL BLUE R3 BLK/WHT RED R2 RANGE 23 RED BLUE GŇD

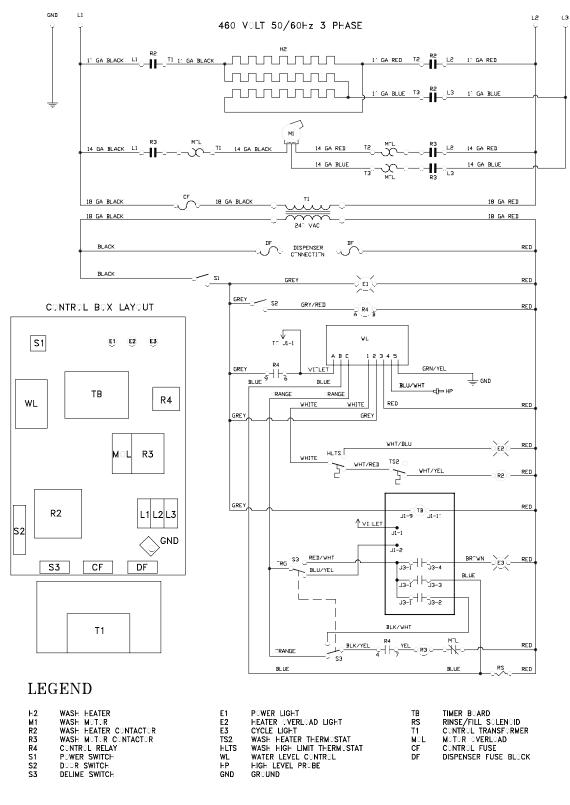
> Tempstar LT/NB/S/SDS Technical Manual 7610-011-86-35 Issued: 12-07-2007 Revised: N/A

S3

9905-003-14-97

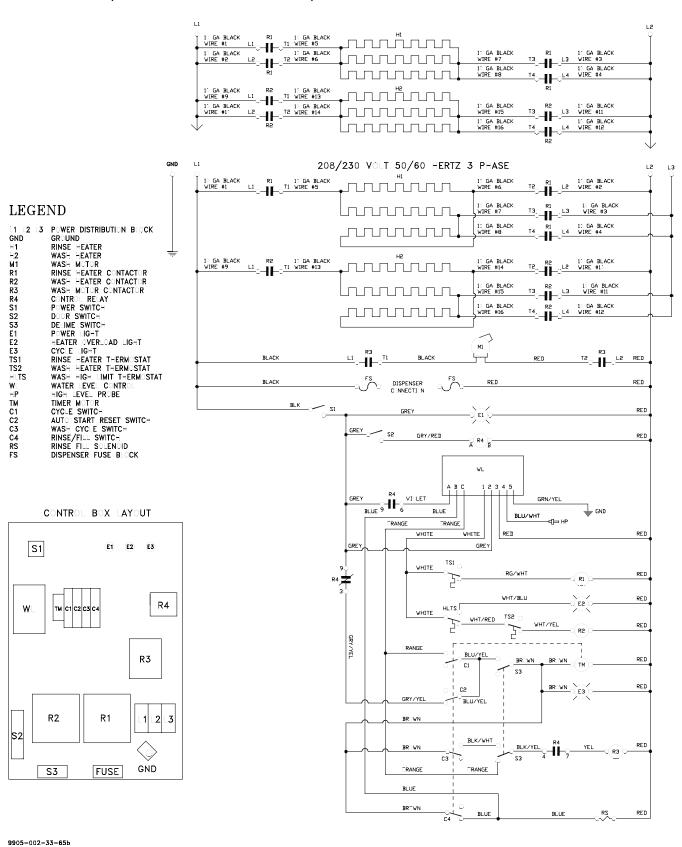
FUSE

#### TEMPSTAR LT & TEMPSTAR NB (TOP MOUNT UNIVERSAL TIMER) 380-415-440-460 VOLT - 50/60 HERTZ - THREE PHASE

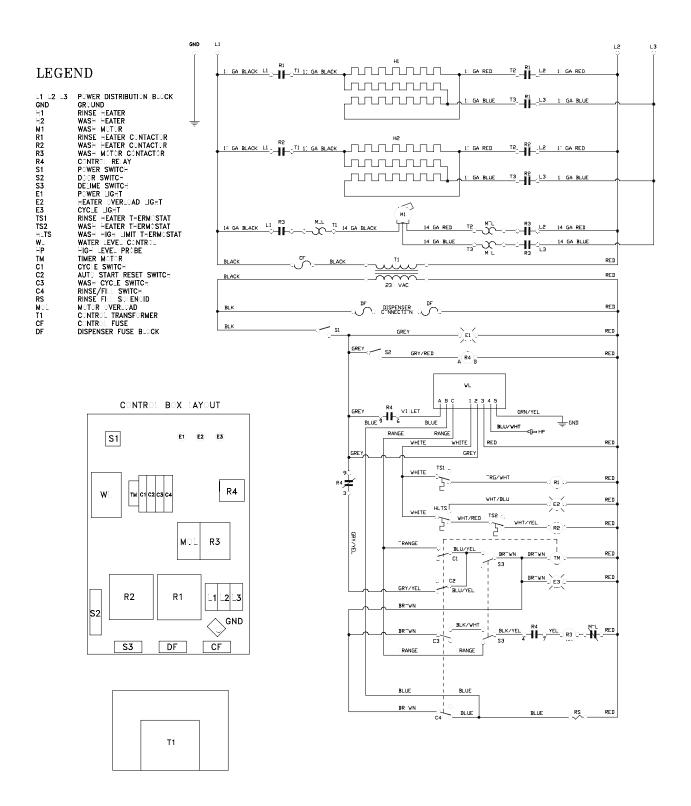


9905-003-14-98%

#### TEMPSTAR (TOP MOUNT MECHANICAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE

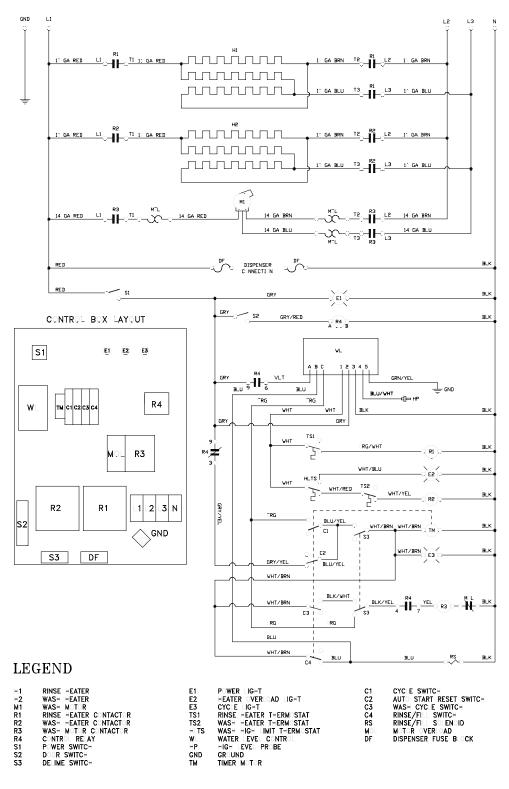


#### TEMPSTAR (TOP MOUNT MECHANICAL TIMER) 380-440-460 VOLT - 50/60 HERTZ - THREE PHASE



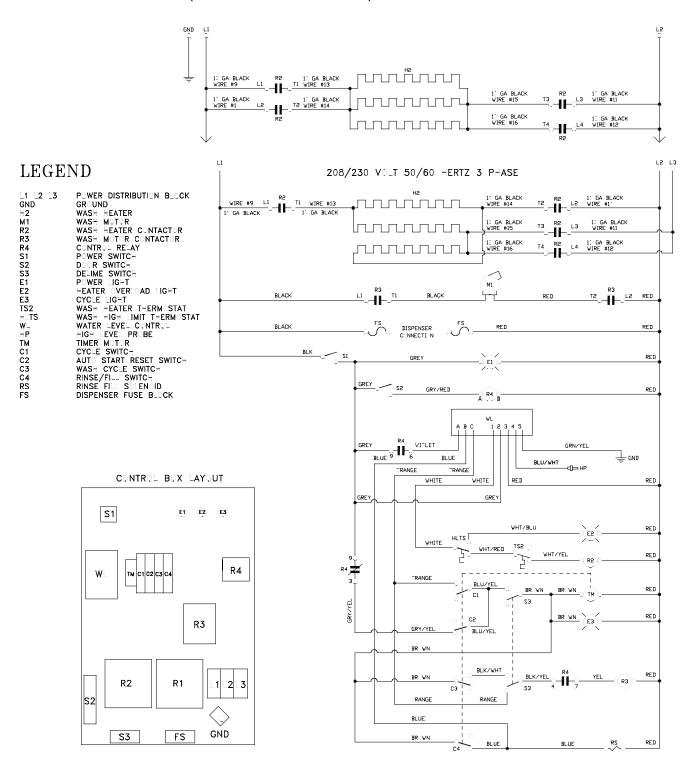
9905-002-57-72d

#### TEMPSTAR (TOP MOUNT MECHANICAL TIMER) 415 VOLT - 50/60 HERTZ - THREE PHASE - 5 WIRE



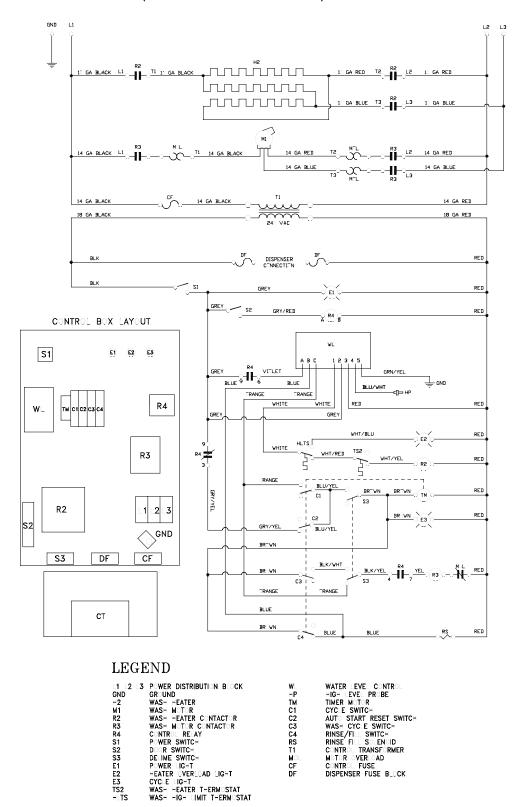
9905-002-76-58a

#### TEMPSTAR LT & TEMPSTAR NB (TOP MOUNT MECHANICAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



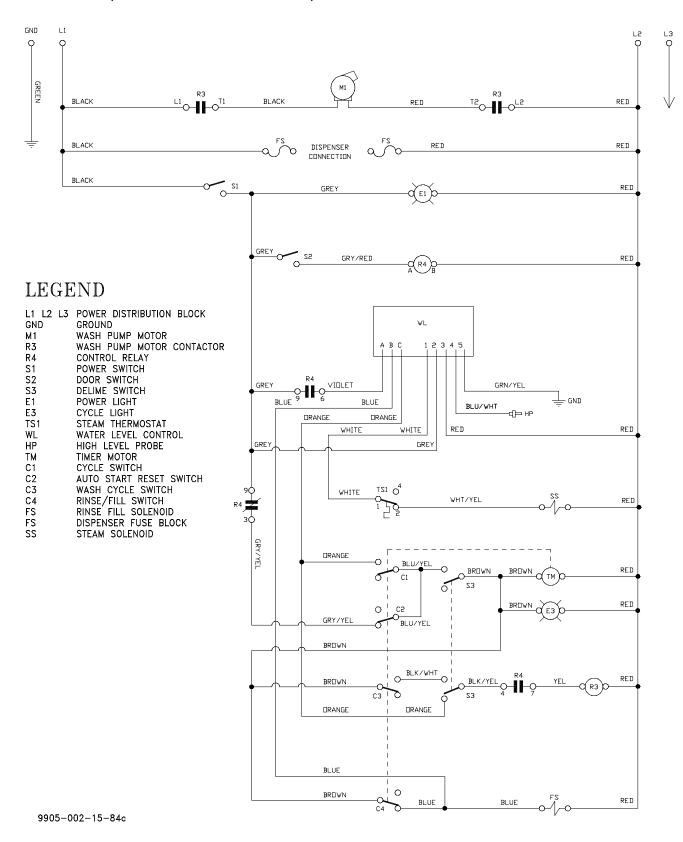
9905-002-53-70Ь

#### TEMPSTAR LT & TEMPSTAR NB (TOP MOUNT MECHANICAL TIMER) 380-415-440-460 VOLT - 50/60 HERTZ - THREE PHASE

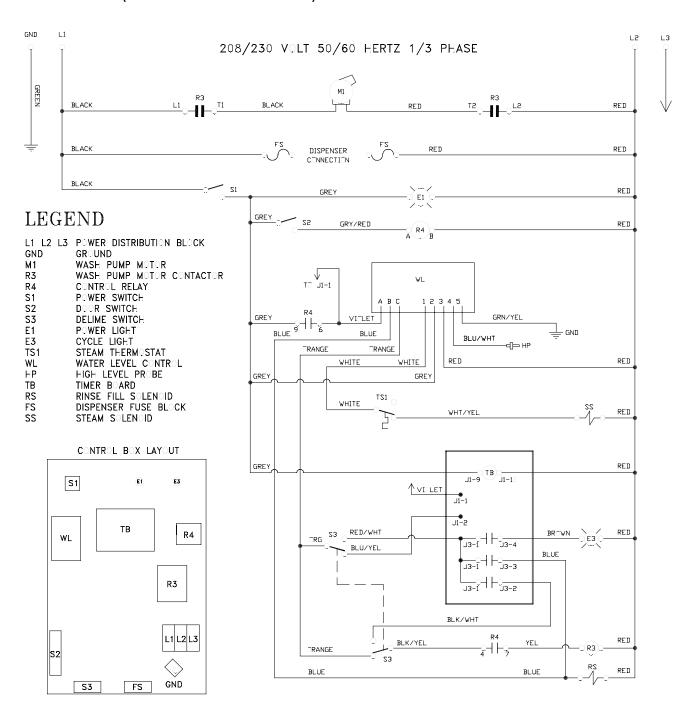


9905-002-55-54d

#### TEMPSTAR S (TOP MOUNT MECHANICAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



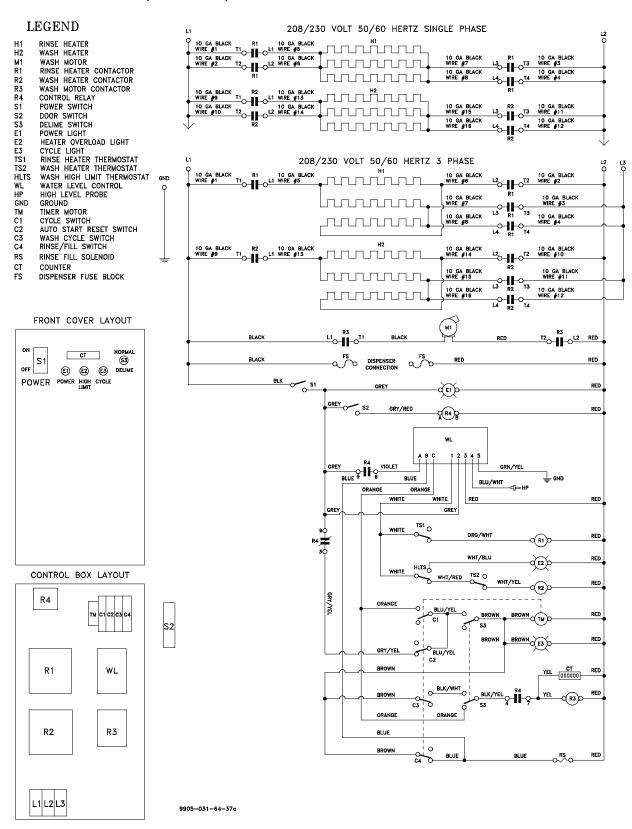
#### TEMPSTAR S (TOP MOUNT UNIVERSAL TIMER) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



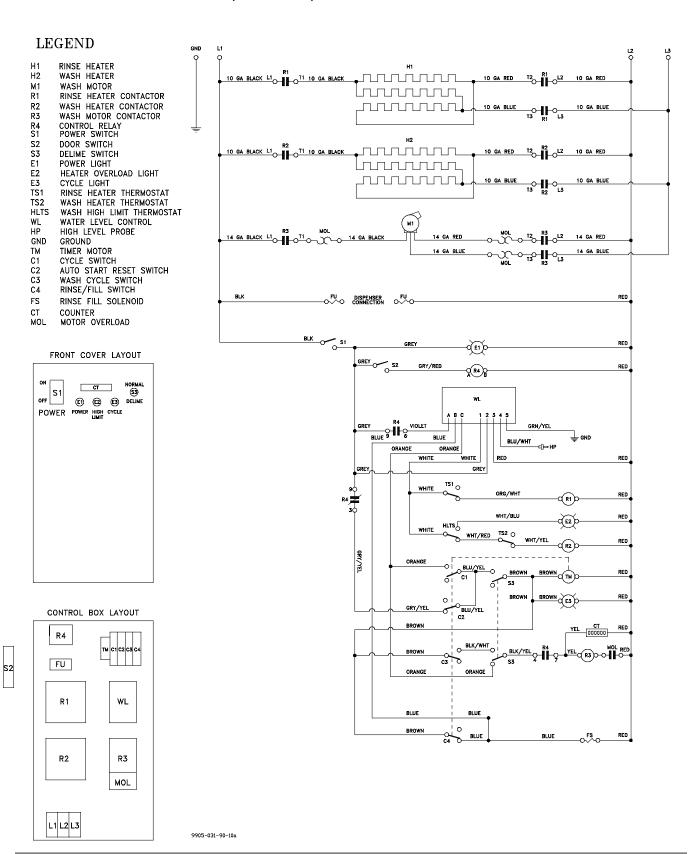
9905-003-14-99a

# SECTION 6B: ELECTRICAL SCHEMATICS FOR SIDE MOUNT UNITS

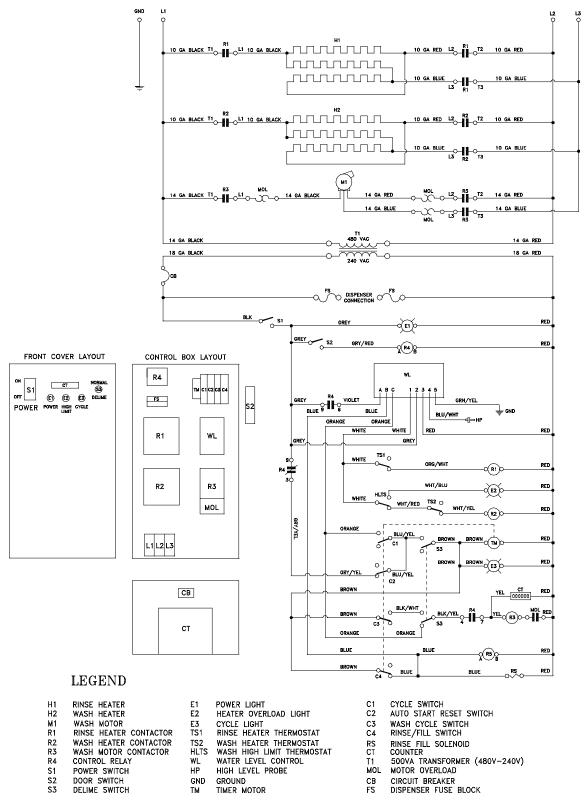
#### TEMPSTAR (SIDE MOUNT) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



#### TEMPSTAR (SIDE MOUNT) 380 VOLT - 50 HERTZ - THREE PHASE

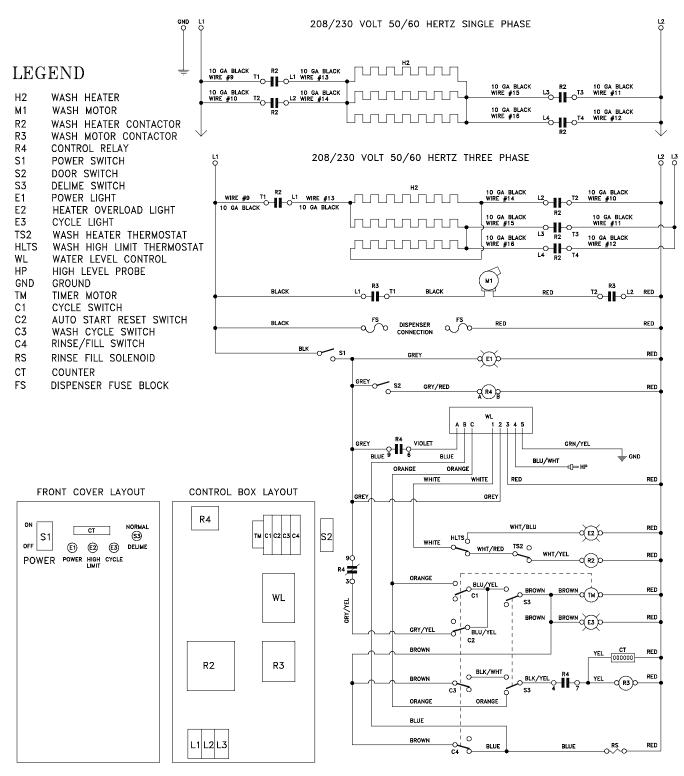


#### TEMPSTAR (SIDE MOUNT) 440-460 VOLT - 50/60 HERTZ - THREE PHASE



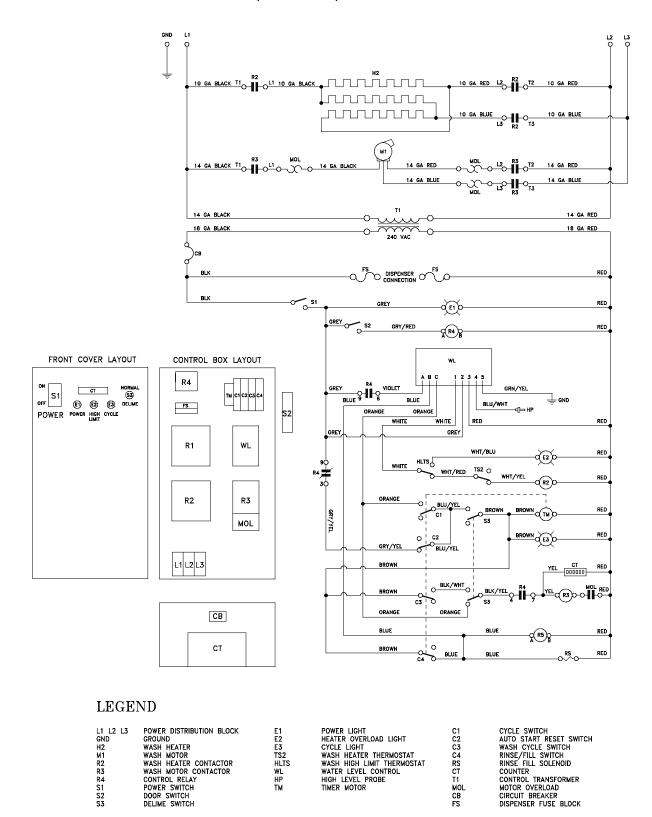
09905-031-66-00

#### TEMPSTAR LT & TEMPSTAR NB (SIDE MOUNT) 208-230 VOLT - 50/60 HERTZ - SINGLE & THREE PHASE



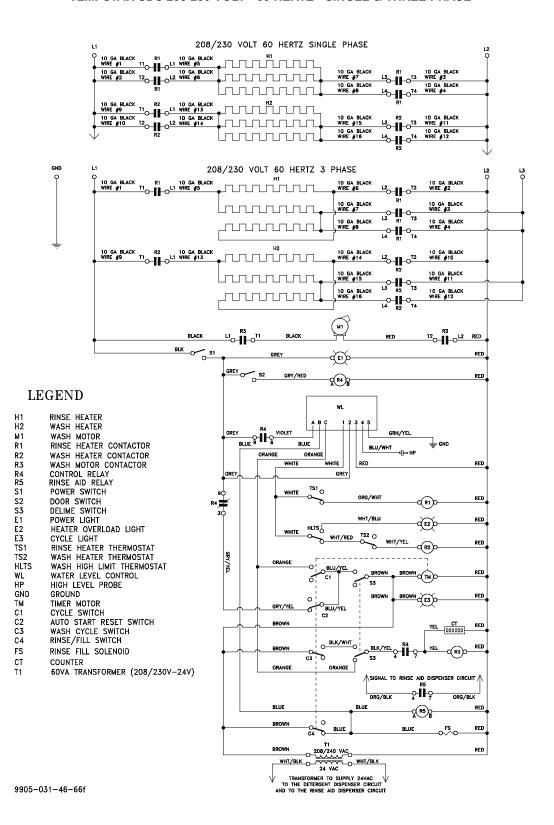
9905-002-24-02a

#### TEMPSTAR LT & TEMPSTAR NB (SIDE MOUNT) 380-440-460 VOLT - 50/60 HERTZ - THREE PHASE

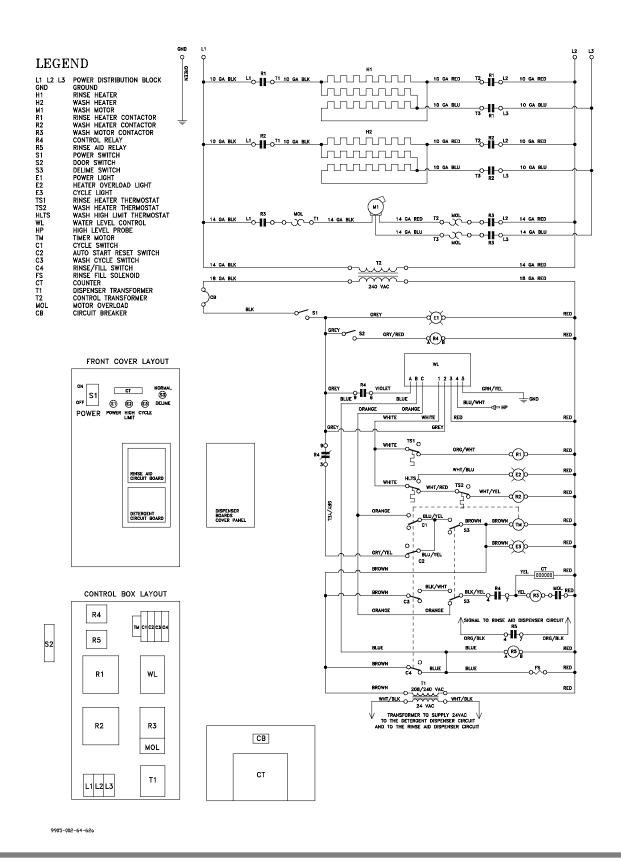


9905-002-06-72Ь

#### TEMPSTAR SDS 208-230 VOLT - 60 HERTZ - SINGLE & THREE PHASE

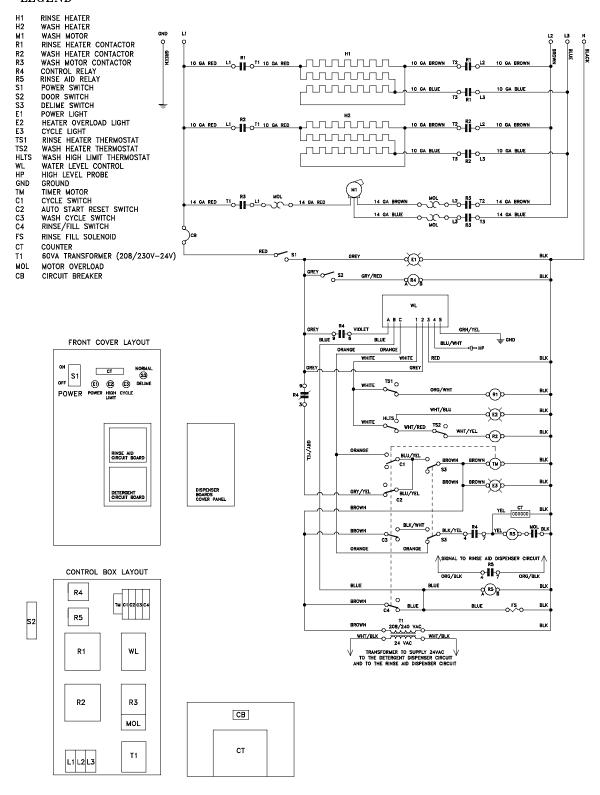


#### TEMPSTAR SDS 380-440-460 VOLT - 50/60 HERTZ - THREE PHASE



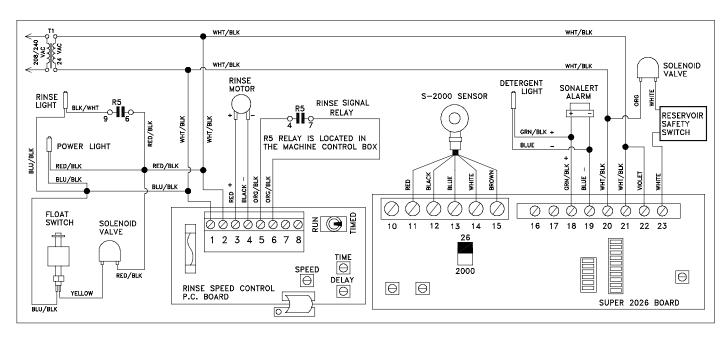
#### TEMPSTAR SDS 380-415 VOLT - 50 HERTZ - THREE PHASE - 5 WIRE

#### LEGEND



9905-031-64-16b

#### **TEMPSTAR SDS DISPENSER SCHEMATIC**

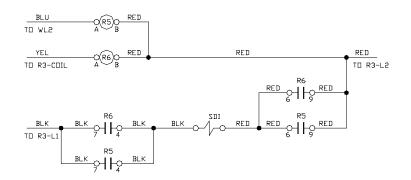


09905-011-48-52

# SECTION 6C: ELECTRICAL SCHEMATICS FOR OPTIONS

#### **SECTION 6: ELECTRICAL SCHEMATICS SDI OPTION**

### TEMPSTAR SDI OPTION

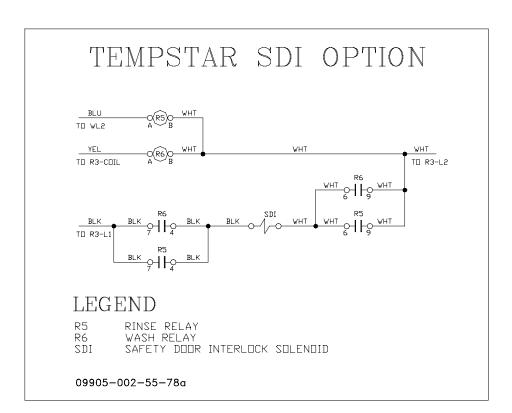


### LEGEND

R5 RINSE RELAY R6

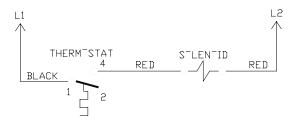
WASH RELAY SAFETY DOOR INTERLOCK SOLENOID SDI

09905-002-35-85a



# SECTION 6: ELECTRICAL SCHEMATICS EXHAUST FAN HOOKUP/DRAIN QUENCH OPTIONS

## DRAIN QUENCH SYSTEM

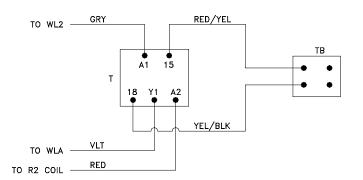


CONNECT BLACK WIRE TO MOTER CONTACTOR - L1 WITH PIGGYBACK TERMINAL PROVIDED CONNECT WHITE WIRE TO MOTER CONTACTOR - L2 WITH PIGGYBACK TERMINAL PROVIDED

### TEMPSTAR EXHAUST FAN HOOKUP

### LEGEND

T TIMER
TB TERMINAL BOARD



9905-002-54-41

# SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### ALABAMA TO FLORIDA

#### ALABAMA

### JONES-McLEOD APPLIANCE SVC

1616 7TH AVE. NORTH BIRMINGHAM, AL 35203 (205) 251-0159 800-821-1150 FAX: (205) 322-1440 service@jones-mcleod.com

### JONES-McLEOD APPLIANCE

854 LAKESIDE DRIVE MOBILE, AL 36693 (251) 666-7278 800-237-9859 FAX: (251) 661-0223

#### **ALASKA**

### RESTAURANT APPLIANCE SERVICE

7219 ROOSEVELT WAY NE SEATTLE, WA 98115 (206) 524-8200 800-433-9390 FAX: (206) 525-2890 info@restappl.com

#### **ARIZONA**

### AUTHORIZED COMMERCIAL FOOD EQMT. SVC

4832 SOUTH 35TH STREET PHOENIX, AZ 85040 (602) 234-2443 800-824-8875 FAX: (602) 232-5862 acsboss@aol.com

#### GCS SERVICE INC.

PHOENIX, AZ (602) 474-4510 800-510-3497 FAX: (602) 470-4511

#### **ARKANSAS**

#### **BROMLEY PARTS & SVC**

10TH AND RINGO P.O. BOX 1688 LITTLE ROCK, AR 72202 (501) 374-0281 800-482-9269 FAX: (501) 374-8352 service@bromleyparts.com parts@bromleyparts.com

#### GCS SERVICE,INC.

3717 CHERRY ROAD MEMPHIS, TN 38118 (901) 366-4587 800-262-9155 FAX: (901) 366-4588

#### **CALIFORNIA**

### BARKERS FOOD MACHINERY SERVICES

5367 SECOND STREET IRWINDALE, CA 91706 (626) 960-9390 800-258-6999 FAX: (626) 337-4541 service@barkers.com

#### GCS SERVICE INC.

LOS ANGELES, CA (213) 683-2090 800-327-1433 FAX: (213) 683-2099

#### GCS SERVICE INC.

SANTA ANA, CA (714) 542-1798 800-540-0719 FAX: (714) 542-4787

#### GCS SERVICE INC.

S. SAN FRANCISCO, CA (650) 635-0720 800-969-4427 FAX: (650) 871-4019

### COMMERCIAL APPLIANCE SERVICE. INC.

6507 PACIFIC AVENUE, SUITE 102 STOCKTON, CA 95207 (916) 567-0203

(800) 464-2222 (916) 567-0266 FAX

#### GCS SERVICE INC.

SAN DIEGO, CA (858) 549-8411 800-422-7278 FAX: (858) 549-2323

#### INDUSTRIAL ELECTRIC SVC.

5662 ENGINEER DRIVE HUNTINGTON BEACH, CA 92649 (714) 379-7100 (800-457-3783 FAX: (714) 379-7109

#### P & D APPLIANCE SVC

100 SOUTH LINDEN AVE. S. SAN FRANCISCO, CA 94080 (650) 635-1900 800-424-1414 FAX: (650) 635-1919 pndappl@aol.com

#### P & D APPLIANCE

4220-C ROSEVILLE ROAD NORTH HIGHLANDS, CA 95660 (916) 974-2772 800-824-7219 FAX:(916) 974-2774

### COMMERCIAL APPLIANCE SERVICE, INC.

281 LATHROP WAY, #100 SACRAMENTO, CA 95815 (916) 567-0203 (800) 464-2222 (916) 567-0324 FAX

#### COLORADO

#### GCS SERVICE INC.

SHERIDAN, CO (303) 371-9054 800-972-5314 FAX: (303) 371-4754

#### HAWKINS COMMERCIAL APPLIANCE SERVICE 3000 S. WYANDOT ST.

ENGLEWOOD, CO 80110 (303) 781-5548 (800) 624-2117 FAX: (303) 761-5561 johns@hawkinscommercial.com

#### METRO APPLIANCE SERVICE

1640 S BROADWAY DENVER, CO 80210 (303) 778-1126 800-525-3532 FAX: (303) 778-0268 metroappls@aol.com

#### CONNECTICUT

#### GCS SERVICE INC.

HARTFORD, CT (860) 549-5575 800-423-1562 FAX: (860) 527-6355

#### SUPERIOR KITCHEN SER-VICE INC.

22 THOMPSON ROAD WINDSOR, CT 06088 (888) 590-1899 (888) 590-1996 FAX

#### **DELAWARE**

#### FOOD SERVICE EQMT. 2101 PARKWAY SOUTH BROOMALL, PA 19008

(610) 356-6900 FAX: (610) 356-2038 dancerule@aol.com

#### GCS SERVICE INC.

PHILADELPHIA, PA (215)925-6217 800-441-9115 FAX: (215) 925-6208

#### **ELMER SCHULTZ SERVICE**

36 BELMONT AVE. WILLMINGTON, DE 19804 (302) 655-8900 800-225-0599 FAX: (302) 656-3673 elmer2@erols.com

#### **EMR SERVICE DIVISION**

106 WILLIAMSPORT CIRCLE SALISBURY, MD 21804 (410) 543-8197 FAX: (410) 548-4038

#### **FLORIDA**

### COMMERCIAL APPLIANCE SERVICE

8416 LAUREL FAIR CIRCLE BLDG 6, SUITE 114 TAMPA, FL 33610 (813) 663-0313 800-282-4718 FAX: (813) 663-0212 commercialappliance@worldnet.att.net

#### GCS SERVICE INC

MIAMI, FL (305) 621-6666 800-766-8966 FAX: (305) 621-6656

#### GCS SERVICE INC

ORLANDO, FL (407) 841-2551 800-338-7322 FAX: (407) 423-8425

### NASS PARTS AND SERVICE, INC.

1144 BELVILLE ROAD, UNIT 359 DAYTONA BEACH, FL 32114 (386) 226-2642 (800) 432-2795 (386) 736-7695 FAX

#### **GCS SERVICE INC**

TAMPA, FL (813) 626-6044 800-282-3008 FAX: (813) 621-1174

#### 

#### FLORIDA TO MARYLAND

### JONES-McLEOD APPLIANCE SVC

854 LAKESIDE DRIVE MOBILE, AL 36693 (251) 666-7278 800-237-9859 FAX: (251) 661-0223 service@jones-mcleod.com

### NASS PARTS AND SERVICE,

1108 SOUTH WOODS AVENUE ORLANDO, FL 32805 (407) 425-2681 (800) 432-2795 (407) 425-3463 FAX

### NASS PARTS AND SERVICE, INC.

1376 HEIDE AVENUE PALM BAY, FL 32907 (321) 952-2012 (800) 432-2795 (321) 953-0266 FAX

#### **GEORGIA**

#### **GCS SERVICE INC**

ATLANTA, GA (770) 452-7322 800-334-3599 FAX: (770) 452-7473

### HERITAGE FOODSERVICE GROUP OF ATLANTA

2100 NORCROSS PKWY. SUITE 130 NORCROSS, GA 30071 (770) 368-1465 866-388-9837 FAX: (866) 388-9838

### WHALEY FOODSERVICE REPAIRS

109-A OWENS INDUSTRIAL DRIVE SAVANNAH, GA 31405 (912) 447-0827 888-765-0036 FAX: (912) 447-0826

#### PIERCE PARTS & SERVICE

2422 ALLEN ROAD MACON, GA 31216 (478) 781-6003 800-368-2512 FAX: (478) 781-7186

#### HAWAII

### FOOD EQMT. PARTS & SERVICE CO.

300 PUUHALE RD. HONOLULU, HI 96819 (808) 847-4871 FAX: (808) 842-1560 fepsco@hula.net

#### **IDAHO**

### RESTAURANT APPLIANCE SVC.

7219 ROOSEVELT WAY NE SEATTLE, WA 98115 (206) 524-8200 800-433-9390 FAX: (206) 525-2890 info@restappl.com

#### **RON'S SERVICE**

703 E 44TH STREET STE 10 GARDEN CITY, ID 83714 (208) 375-4073 FAX: (208) 375-4402

#### **ILLINOIS**

#### CONES REPAIR SVC.

2408 40TH AVE. MOLINE, IL 61265 (309) 797-5323 800-716-7070 FAX: (309)797-3631 jackb@cones.com

#### **EICHENAUER SERVICES INC.**

130 S OAKLAND ST. DECATUR, IL 62522 (217) 429-4229 800-252-5892 FAX: (217) 429-0226 esi@esiquality.com

#### GCS SERVICE INC.

ELMHURST, IL (630) 941-7800 800-942-9689 FAX: (630) 941-6048

#### GCS SERVICE INC.

ST. LOUIS, MO (314) 683-7444 800-284-4427 FAX: (314) 638-0135

#### GENERAL PARTS, INC.

248 JAMES STREET BENSONVILLE, IL 60106 (630) 595-3300 (800) 880-3604 FAX: (630)595-0006

#### **INDIANA**

#### GCS SERVICE INC.

INDIANAPOLIS, IN (317) 545-9655 800-727-8710 FAX: (317) 549-6286

B622 LA PAS TRAIL INDIANAPOLIS, IN 46268 (317) 290-8060 (800) 410-9794 (317) 290-8085 FAX

#### IOWA GOODWIN TUCKER GROUP

#### 2900 DELAWARE AVENUE

DES MOINES, IA 50317 (515) 262-9308 800-372-6066 FAX: (515) 262-2936 parts@goodwintucker.com

#### **CONES REPAIR SVC.**

1056 27TH AVENUE SW CEDAR RAPIDS, IA 52404 (319) 365-3325 800-747-3326 FAX: (319) 365-0885

#### **KANSAS**

#### GCS SERVICE INC.

KANSAS CITY, MO (816) 920-5999 800-229-6477 FAX: (816) 920-7387

#### **GENERAL PARTS, INC.**

1101 E. 13TH STREET KANSAS CITY, MO 64106 (816) 421-5400 (800) 279-9967 (816) 421-1270 FAX

#### **KENTUCKY**

#### CERTIFIED SERVICE CENTER

127 DISHMAN LANE BOWLING GREEN, KY 42101 (270) 783-0012 (877) 907-0012 FAX: (270) 783-0058

### CERTIFIED SERVICE CENTER RAMCO BUSINESS PARK

4283 PRODUCE ROAD LOUISVILLE, KY 40218 (502) 964-7007 800-637-6350 FAX: (502) 964-7202 cwalker@certifiedsc.com droenigk@certifiedsc.com

#### CERTIFIED SERVICE CENTER

1051 GOODWIN DRIVE LEXINGTON, KY 40505 (606) 254-8854 800-432-9269 FAX: (606) 231-7781 jatkins@certifiedsc.com

#### GCS SERVICE INC.

LOUISVILLE, KY (502) 367-1788 800-752-6160 FAX: (502) 367-0400

#### GCS SERVICE INC.

LEXINGTON, KY (606) 255-0746 800-432-9260 FAX: (606) 255-0748

#### **LOUISIANA**

#### HERITAGE SERVICE GROUP

1532 RIVER OAKS WEST NEW ORLEANS, LA 70123 (504) 734-8864 (800) 499-2351 (504) 733-2559 FAX

#### MAINE

#### GCS SERVICE INC.

CHELSEA, MA (617) 889-9393 800-225-1155 FAX: (617) 889-1222

#### MASSACHUSETTS RESTAU-RANT SUPPLY

34 SOUTH STREET SOMERVILLE, MA 02143 (617) 868-1930 800-338-6737 FAX: (617) 686-5331

#### PINE TREE FOOD EQUIP-MENT

175 LEWISTON ROAD GRAY, ME 04039 (207) 657-6400 (800) 540-5427 (207) 657-5464 FAX

#### **MARYLAND**

#### **EMR SERVICE DIVISION**

700 EAST 25TH STREET BALTIMORE, MD 21218 (410) 467-8080 800-879-4994 FAX: (410) 467-4191 baltparts@emrco.com

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### MARYLAND TO NEW YORK

#### **EMR SERVICE DIVISION**

106 WILLIAMSPORT CIRCLE SALISBURY, MD 21804 (410) 543-8197 888-687-8080 FAX: (410) 548-4038 baltparts@emrco.com

#### **EMR SERVICE DIVISION**

5316 Sunnyside Ave.
Beltsville, MD 20715
(301) 931-7000
800-348-2365
FAX: (301) 931-3060
baltparts@emrco.com
GCS SERVICE INC.
SILVER SPRING, MD
(301) 585-7550 (DC)
(410) 792-0338 (BALT)
(800) 638-7278
FAX: (301) 495-4410

#### **MASSACHUSETTS**

ACE SERVICE CO. 95 HAMPTON AVE. NEEDHAM, MA 02494 (781) 449-4220 800-225-4510 MA & NH FAX: (781) 444-4789 taceservice@aol.com

#### MASSACHUSETTS RESTAU-RANT SUPPLY

34 SOUTH STREET SOMERVILLE, MA 02143 (617) 868-1930 800-338-6737 FAX: (617) 868-5331

#### GCS SERVICE INC.

CHELSEA, MA (617) 889-9393 800-225-1155 FAX: (617) 889-1222

#### GCS SERVICE INC.

HARTFORD, CT (860) 549-5575 800-723-1562 FAX: (860) 527-6355

#### SUPERIOR KITCHEN SER-VICE INC.

399 FERRY STREET EVERETT, MA 02149 (617) 389-1899 (888) 590-1899 (617) 389-1996 FAX

#### **MICHIGAN**

#### GCS SERVICE INC.

LIVONIA, MI (248) 426-9500 800-772-2936 FAX: (248) 426-7555

### JACKSON SERVICE COMPA-

3980 BENSTEIN RD. COMMERCE TWSHP, MI 48382 (248) 363-4159 800-332-4053 FAX: (248) 363-5448

#### GCS SERVICE INC.

GRAND RAPIDS, MI (616) 241-0200 800-823-4866 FAX: (616) 241-0541

#### **MINNESOTA**

#### GCS SERVICE INC.

MINNEAPOLIS, MN (612) 546-4221 800-345-4221 FAX: (612) 546-4286

#### **GENERAL PARTS, INC.**

11311 HAMPSHIRE AVENUE SOUTH BLOOMINGTON, MN 55438-2456 (952) 944-5800 (800) 279-9980 (800) 279-9980 FAX

#### MISSISSIPPI

#### GCS SERVICE INC.

JACKSON, MS (601) 956-7800 800-274-5954 FAX: (601) 956-1200

#### GCS SERVICE INC.

MEMPHIS, TN (901) 366-4587 800-262-9155 FAX: (901) 366-4588

#### MISSOURI

#### GCS SERVICE INC. KANSAS CITY, MO (816) 920-5999 800-229-6477 FAX: (816) 920-7387

#### GCS SERVICE INC.

ST. LOUIS, MO (314) 638-7444 800-284-4427 FAX: (314) 638-0135

### KAEMMERLIN PARTS & SVC. 2728 LOCUST STREET

ST. LOUIS, MO 63103 (314) 535-2222 FAX: (314) 535-6205 petek@kps.stl.com

#### GENERAL PARTS, INC.

1101 EAST 13TH STREET KANSAS CITY, MO 64106 (816) 421-5400 (800) 279-9967 (816) 421-1270 FAX

#### **MONTANA**

### RESTAURANT APPLIANCE SVC.

7219 ROOSEVELT WAY NE SEATTLE, WA 98115 (206) 524-8200 800-433-9390 FAX: (206) 525-2890 info@restappl.com

#### **NEBRASKA**

#### **GOODWIN - TUCKER GROUP**

7535 D STREET OMAHA, NE 68124 (402) 397-2880 800-228-0342 FAX: (402) 397-2881 askme@goodwintucker.com

#### NEVADA

#### HI TECH COMMERCIAL SER-VICE

1840 STELLA LAKE STREET NORTH LAS VEGAS, NV 89106 (702) 649-4616 (877) 924-4832 FAX: (702) 649-4607 larry@hitechnv.com

5454 LOUIE LANE RENO, NV 89511 (775) 852-9696 FAX: (775) 852-5104

#### GCS SERVICE INC.

LAS VEGAS, NV (702) 450-3495 800-500-9060 FAX: (702) 450-3491

#### **NEW HAMPSHIRE**

#### GCS SERVICE INC.

CHELSEA, MA (617)889-9393 800-225-1155 FAX: (617) 889-1222

#### ACE SERVICE CO.

95 HAMPTON AVE. NEEDHAM, MA 02494 (781) 449-4220 800-225-4510 MA & NH FAX: (781) 444-4789 taceservice@aol.com

#### MASSACHUSETTS RESTAU-RANT SUPPLY

34 SOUTH STREET SOMERVILLE, MA 02143 (617) 868-1930 800-338-6737 FAX: (617) 868-5331

#### **NEW JERSEY**

#### JAY HILL REPAIRS

90 CLINTON RD. FAIRFIELD, NJ 07004 (973) 575-9145 800-836-0643 FAX: (973) 575-5890 jhrepair@aol.com

#### GCS SERVICE INC.

EAST RUTHERFORD, NJ (973) 614-0003 800-399-8294 FAX: (973) 614-0230

#### GCS SERVICE INC.

PHILADELPHIA, PA (215) 925-6217 800-441-9115 FAX: (215) 925-6208

#### **ELMER SCHULTZ SERVICES**

201 W. WASHINGTON AVE. PLEASANTVILLE, NJ 08232 (609) 641-0317 800-378-1641 FAX:(609) 641-8703 elmer2@erols.com

#### **NEW YORK**

### APPLIANCE INSTALLATION AND SERVICE CORP.

1336 MAIN STREET BUFFALO, NY 14209 (716) 884-7425 800-722-1252 FAX: (716) 884-0410 ais@worldnet.att.net

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS —

#### **NEW YORK TO PENNSYLVANIA**

#### B.E.S.T. INC.

3003 GENESEE STREET BUFFALO, NY 14225 (716) 893-6464 800-338-5011 FAX: (716) 893-6466 bestserv@aol.com

#### **DUFFY'S EQUIPMENT SVC.**

3138 ONEIDA STREET SAUQUOIT, NY 13456 (315) 737-9401 800-443-8339 FAX: (315) 737-7132 duffyequip@aol.com

#### **NORTHERN PARTS & SVC.**

21 NORTHERN AVENUE PLATTSBURGH, NY 12903 (518) 563-3200 800-634-5005 FAX: (800) 782-5424 info@northernparts.com

#### GCS SERVICE INC.

BROOKLYN, NY (718) 486-5220 800-969-4271 FAX: (718) 486-6772

#### **ALL SERVICE KITCHEN**

EQUIPMENT REPAIR 10 CHARLES ST. NEW HYDE PARK, NY 11040 (516) 378-1176 FAX: (516) 378-1735

#### **ALL ISLAND REPAIRS**

40-9 BURT DRIVE DEER PARK, NY 11729 (631) 242-5588 FAX: (631) 242-6102

#### NORTH CAROLINA

#### **AUTHORIZED APPLIANCE**

SERVICECENTER 1020 TUCKASEEGEE RD. CHARLOTTE, NC 28208 (704) 377-4501 (800) 532-6127 FAX:(704) 377-4504

#### **AUTHORIZED APPLIANCE**

SERVICECENTER 800 N. PERSON ST. RALEIGH, NC 27604 (919) 834-3476 FAX:(919) 834-3477

### AUTHORIZED APPLIANCE SERVICECENTER

904 S. MARSHALL ST. WINSTON-SALEM, NC 27403 (336) 725-5396 FAX:(336) 721-1289

### AUTHORIZED APPLIANCE SERVICECENTER

104 HINTON AVE. WILMINGTON, NC 28403 (910) 313-1250 FAX:(910) 313-6130

#### WHALEY FOODSERVICE

8334-K ARROWRIDGE BLVD CHARLOTTE, NC 28273 (704) 529-6242 FAX: (704) 529-1558 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

203-D CREEK RIDGE RD. GREENSBORO, NC 27406 (336) 333-2333 FAX: (336) 333-2533 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

335-105 SHERWEE DRIVE RALEIGH, NC 27603 (919) 779-2266 FAX: (919) 779-2224 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

6418-101 AMSTERDAM WAY WILMINGTON, NC 28405 (910) 791-0000 FAX: (910) 791-6662 info@whaleyfoodservice.com

#### **NORTH DAKOTA**

#### GCS SERVICE INC.

MINNEAPOLIS, MN (612) 546-4221 800-345-4221 FAX: (612) 546-4286

#### GENERAL PARTS, INC.

10 SOUTH 18TH STREET FARGO, ND 58103 (701) 235-4161 (800) 279-9987 (701) 235-0539 FAX

#### OHIO

#### CERTIFIED SERVICE CENTER

890 REDNA TERRACE CINCINNATI, OH 45215 (513) 772-6600 800-543-2060 FAX: (513) 612-6600 sbarasch@certifiedsc.com

#### CERTIFIED SERVICE CENTER 171J-K NORTH HAMILTON RD. COLUMBUS, OH 43213

(614) 751-3769 (866) 862-1252 FAX: (614) 751-5792 jadkins@certifiedsc.com

#### **CERTIFIED SERVICE CENTER**

6025 N. DIXIE DRIVE DAYTON, OH 45414 (937) 898-4040 (800) 257-2611 FAX: (937) 898-4177 dharvey@certifiedsc.com

### COMMERCIAL PARTS & SVC. OF COLUMBUS

5033 TRANSAMERICA DRIVE COLUMBUS, OH 43228 (614) 221-0057 800-837-8327 FAX: (614) 221-3622

#### GCS SERVICE INC.

COLUMBUS, OH (614) 476-3225 800-282-5406 FAX: (614) 476-1196

### ELECTRICAL APPLIANCE REPAIR SVC.

5805 VALLEY BELT ROAD CLEVELAND, OH 44131 (216) 459-8700 800-621-8259 FAX: (216) 459-8707 tomr@electapplrep.com

#### **OKLAHOMA**

#### HAGAR RESTAURANT EQMT.

1229 W MAIN STREET OKLAHOMA CITY, OK 73106 (405) 235-2184 800-445-1791 FAX: (405) 236-5592

#### **OREGON**

#### **RON'S SERVICE**

16364 SW 72ND AVE PORTLAND, OR 97224 (503) 624-0890 800-851-4118 FAX: (503) 684-6107 Irobinson@ronsservice.com

#### **PENNSYLVANIA**

### A.I.S. COMMERCIAL PARTS & SERVICE

1816 WEST 26TH STREET ERIE, PA 16508 (814) 456-3732 800-332-3732 FAX: (814) 452-4843 aiserie@aol.com

#### **ELMER SCHULTZ SVC.**

540 NORTH 3RD STREET PHILADELPHIA, PA 19123 (215) 627-5400 FAX: (215) 627-5408 elmer2@erols.com

#### GCS SERVICE INC.

PHILADELPHIA, PA (215) 925-6217 800-441-9115 FAX: (215) 925-6208

#### GCS SERVICE INC.

HARRISBURG, PA (717) 564-3282 800-367-3225 FAX: (717) 564-9286

#### GCS SERVICE INC.

PITTSBURGH, PA (412) 787-1970 800-738-1221 FAX: (412) 787-5005

### K & D PARTS AND SERVICE

1833-41 N CAMERON STREET HARRISBURG, PA 17103 (717) 236-9039 800-932-0503 FAX: (717) 238-4367 kdparts-service@paonline.com

#### **CLARK SERVICE & PARTS**

306 AIRPORT DRIVE BOX 10 SMOKETOWN, PA 17576 (717) 392-5590 (717) 392-5735

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS —

#### RHODE ISLAND TO WISCONSIN

#### RHODE ISLAND

#### GCS SERVICE INC.

EAST PROVIDENCE, RI (401) 434-6803 800-462-6012 FAX: (401) 438-9400

#### SUPERIOR KITCHEN SER-VICE INC.

669 ELMWOOD AVENUE PROVIDENCE, RI 02907 (888) 590-1899 (401) 781-1996 FAX

#### **SOUTH CAROLINA**

### AUTHORIZED APPLIANCE SERVICECENTER

1811 TAYLOR ST. COLUMBIA, SC 29202 (803) 254-8414 FAX: (803) 254-5146

### AUTHORIZED APPLIANCE SERVICECENTER

2249 AUGUSTA RD. GREENVILLE, SC 29605 (864) 235-9616 FAX: (864) 235-9623

### WHALEY FOODSERVICE REPAIRS

I 26&US1 P.O. BOX 4023 WEST COLUMBIA, SC 29170 (803) 791-4420 800-877-2662 FAX: (803) 794-4630 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

748 CONGAREE ROAD GREENVILLE, SC 29607 (864) 234-7011 800-494-2539 FAX: (864) 234-6662 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

1406-C COMMERCE PL. MYRTLE BEACH, SC 29577 (843) 626-1866 FAX: (843) 626-2632 info@whaleyfoodservice.com

### WHALEY FOODSERVICE REPAIRS

4740-A FRANCHISE STREET N. CHARLESTON, SC 29418 (843) 760-2110 FAX: (843) 760-2255 info@whaleyfoodservice.com

#### **SOUTH DAKOTA**

#### GCS SERVICE INC.

MINNEAPOLIS, MN (612) 546-4221 800-345-4221 FAX: (612) 546-4286

#### GENERAL PARTS, INC.

10 SOUTH 18TH STREET FARGO, ND 58103 (701) 235-4161 (800) 279-9987 (701) 235-0539 FAX

#### **TENNESSEE**

#### GCS SERVICE INC.

MEMPHIS, TN (901) 366-4587 800-262-9155 FAX: (901) 366-4588

#### GCS SERVICE INC.

NASHVILLE, TN (615) 244-8050 800-831-7174 FAX: (615) 244-8885

#### **TEXAS**

### ARMSTRONG REPAIR CEN-

5110 GLENMOUNT DRIVE HOUSTON, TX 77081 (713) 666-7100 800-392-5325 FAX: (713) 661-0520 gm@armstrongrepair.com

### COMMERCIAL KITCHEN REPAIR CO.

1377 N BRAZOS

P.O BOX 831128 SAN ANTONIO, TX 78207 (210) 735-2811 800-292-2120 FAX: (210) 735-7421 brock@commercialkitchen.com

#### GCS SERVICE INC.

DALLAS, TX (972) 484-2954 800-442-5026 FAX: (972) 484-2531

#### GCS SERVICE INC.

HOUSTON, TX (713)785-9187 800-868-6957 FAX: (713) 785-3979

#### GCS/STOVE PARTS

2120 SOLANA STREET FORT WORTH, TX 76117 (817) 831-0381 800-433-1804 FAX: (817) 834-7754 bud@stoveparts.com

#### **UTAH**

### LA MONICA'S RESTAURANT EQMT. SVC.

6182 SOUTH STRATLER AVENUE MURRAY, UT 84107 (801) 263-3221 800-527-2561 FAX: (801) 263-3229 lamonica81@aol.com

#### **VERMONT**

#### **NORTHERN PARTS & SVC.**

4874 S. CATHERINE STREET PLATTSBURGH, NY 12901 (518) 563-3200 800-634-5005 FAX: (800) 782-5424 info@northernparts.com

#### GCS SERVICE INC.

CHELSEA, MA (617)889-9393 800-225-1155 FAX: (617) 889-1222

#### **VIRGINIA**

#### DAUBERS, INC.

7645 DYNATECH COURT SPINGFIELD, VA 22153 (703) 866-3600 800-554-7788 FAX: (703) 866-4071 daubers@aol.com

#### GCS SERVICE INC.

SILVER SPRING, MD (301) 585-7550(DC) (410) 792-0388(BALT) 800-638-7278 FAX: (301)495-4410

#### GCS SERVICE INC.

RICHMOND, VA (804) 672-1700 800-899-5949 FAX: (804) 672-2888

#### GCS SERVICE INC.

VIRGINIA BEACH, VA (757) 464-3500 800-476-4278 FAX: (757) 464-4106

#### WASHINGTON

#### GCS SERVICE INC.

SEATTLE, WA (206) 763-0353 800-211-4274 FAX: (206) 763-5943

### RESTAURANT APPLIANCE SERVICE

7219 ROOSEVELT WAY, NE SEATTLE, WA 98115 (206) 524-8200 800-433-9390 FAX: (206) 525-2890 info@restappl.com

#### **WEST VIRGINIA**

#### STATEWIDE SERVICE, INC.

603 MAIN AVE. NITRO, WV 25143 (304) 755-1811 (800) 441-9739 FAX: (304) 755-4001 sws3182@aol.com

#### **WISCONSIN**

### APPLIANCE SERVICE CENTER. INC.

2439 ATWOOD AVE MADISON, WI 53704 (608) 246-3160 800-236-7440 FAX: (608) 246-2721 ascmad@execpc.com

### APPLIANCE SERVICE CENTER. INC.

6843 W. BELOIT RD. WEST ALLIS, WI 53219 (414) 543-6460 800-236-6460 FAX: (414) 543-6480 ascmil@execpc.com

### APPLIANCE SERVICE CENTER

786 MORRIS AVE GREEN BAY, WI 54304 (920) 496-9993 800-236-0871 FAX: (920) 496-9927 ascfox@execpc.com

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### WISCONSIN TO WYOMING/INTERNATIONAL

#### **GENERAL PARTS, INC.**

W223 N735 SARATOGA DRIVE WAUKESHA, WI 53186 (262) 650-6666 (800) 279-9946 (262) 650-6660 FAX

#### WYOMING

### HAWKINS COMMERCIAL APPLIANCE SERVICE

3000 S. WYANDOT ST. ENGLEWOOD, CO 80110 (303) 781-5548 (800) 624-2117 FAX: (303) 761-5561 johns@hawkinscommercial.com

#### **METRO APPLIANCE SERVICE**

1640 S BROADWAY DENVER, CO 80210 (303) 778-1126 800-525-3532 FAX: (303) 778-0268 metroappls@aol.com

#### INTERNATIONAL

#### **GLOBAL PARTS AND SUPPLY**

7758 NW 72ND ST MIAMI, FL 33166 (305) 885-6353

#### H.D. SHELDON AND CO

19 UNION SQUARE, WEST NEW YORK, NY 10003 (212) 627-1759 (212) 924-6920

#### CANADA

#### THE GARLAND GROUP

1177 KAMATO ROAD MISSISSAUGA, ONTARIO L4W 1X4 (905) 206-8380 SALES (905) 624-1419 FAX: (905) 624-1851 SERVICE 800-427-6668 FAX: 800-361-7745

March 13, 2007